Draft

Quanta Resources Corporation Superfund Site, Operable Unit 1 (OU1) Vapor Intrusion 2014/2015 Results Report

Prepared for

Honeywell International Inc.

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CH2MHILL®

537401

Contents

Acronyms and Abbreviations

COPC	constituents of potential concern
EPA	U.S. Environmental Protection Agency
ERA	engineered response action
F°	Fahrenheit
GIS	Geographic Information System
Honeywell	Honeywell International Inc.
HQ	hazard quotient
IASL	indoor air screening level
ITRC	Interstate Technology and Regulatory Council
N.J.A.C.	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
NJDOH	New Jersey Department of Health
OSRTI	Office of Superfund Remediation and Technology Innovation
OU	Operable Unit
RAL	Rapid Action Level
ROD	Record of Decision
SGSL	soil gas screening level
VI	vapor intrusion
VITG	Vapor Intrusion Technical Guidance

SECTION 1

Introduction

Vapor intrusion (VI) monitoring events were conducted in March and May of 2015 as part of the routine monitoring effort being performed at the Quanta Resources Corporation Superfund Site in Edgewater, New Jersey (the Site), as required by the U.S. Environmental Protection Agency (EPA) the Remedial Design/Remedial Action Consent Decree (CD) statement of work (SOW) for Civil Action Number 2:12-CV-7091-SRC-CLW. The CD between Honeywell and U.S. Environmental Protection Agency (EPA) was lodged on November 27, 2012, and became effective on March 11, 2013 (EPA, 2012).

The monitoring events were conducted in accordance with the agency-approved work plan(CH2M HILL, 2014) and the follow up letter to EPA (CH2M HILL, 2015). The 2014/2015 sampling event occurred at 115 River Road, 163 Old River Road, and 103 River Road, which are occupied properties within Operable Unit 1 (OU1) The objective of this monitoring event was to confirm that the conditions at each building are similar to those previously documented in the 2011 Record of Decision (ROD), specifically as stated on page 29: “although elevated levels of site contaminants” were detected in subslab soil gas, “the detected levels [in indoor air] have not exceeded U.S. Environmental Protection Agency (EPA) guidelines for exposure to indoor air.”

The VI monitoring events and evaluations were performed in accordance with the following EPA and New Jersey Department of Environmental Protection (NJDEP)–approved work plans and Quality Assurance Plan, and guidance documents (CH2M HILL, 2013, 2014, 2015; EPA, 2002, 2015[1]; EPA Office of Superfund Remediation and Technology Innovation, 2015; Interstate Technology and Regulatory Council, 2007; NJDEP, 2013).

In accordance with the agency-approved work plan, when there is a disparity between EPA and NJDEP guidance, the EPA guidance and/or EPA Region 2 standard practices will take precedence, because EPA Region 2 is the lead regulatory agency for the Quanta Resources Superfund Site. However, it should be noted that, historically, the sample collection, analytical, and data-submittal procedures used for the VI monitoring at the Site are consistent with NJDEP (2013) VITG.

[1] Note that EPA (2015) was released after sampled had been completed.

SECTION 2

Sampling Methods

Sampling activities were performed according to the procedures set forth in the field sampling plan section of the work plan (CH2M HILL, 2014), with the exception of the deviations detailed in Attachment B and as noted below.

Adverse weather conditions encountered during the sampling activities delayed the collection of some samples. The 2014–2015 annual VI monitoring event had the following chronology:

- **March 10–13, 2015.** Samples at 103 River Road, 163 Old River Road, and the majority of samples were collected at 115 River Road. Samples were not collected within the basement of 115 River Road and within the occupied space of Building 7/8 due to abnormal weather conditions which led to flooding of the basement and unsafe conditions. Over an inch of rain fell during the week with over a foot of snowpack.
- **March 19, 2015.** One indoor air sample was re-collected at Building 3 (Q1-IA-13) at 115 River Road. Due to a canister failure during shipping as part of the original mobilization, the sample had to be re-collected.
- **March 26, 2015.** Two indoor samples on the first floor of Building 7/8 at 115 River Road and two outdoor samples were collected. These sample collections were postponed during the first field event as described above
- **May 20, 2015.** The final basement sample and one crawl space sample were collected at 115 River Road after the basement was determined to be dry and safe to enter. For comparative purposes, one additional outdoor air sample near Building 12 was re-collected.

In total, 20 indoor air, four crawl space air, five outdoor air, and four field duplicate samples were collected at 115 River Road. Three indoor air, two outdoor air, two subslab soil gas, and one field duplicate sample were collected at 163 Old River Road. Four indoor air, two outdoor air, two subslab soil gas, and one field duplicate sample were collected at 103 River Road.

A significant amount of precipitation (over 1 inch of rain on top of a 16-inch snowpack) fell in March during the initial sampling event. The other March sampling events were relatively dry. Temperatures over the course of the March sampling events varied between 36°F and 52°F. In May there was no precipitation during sampling, and the average daily temperature was 61°F.

The following sampling event information is provided:

- Attachment A—sampling location figures
- Attachment B—sampling logs
- Attachment C—building survey forms
- Attachment D—chain-of-custody forms

SECTION 3

Sample Results

The Summa canisters were shipped to the analytical laboratory, ALS Environmental (formerly Columbia Analytical Services) in Simi Valley, California, under chain-of-custody procedures (Attachment D). The indoor air, crawl space air, outdoor air, and subslab soil gas samples were analyzed using EPA Method TO-15. Naphthalene was analyzed in the air samples using TO-15 selective ion monitoring mode to achieve required reporting limits. ALS is certified for TO-15 analyses by NJDEP (NJ Certification No. CA009).

The project chemist performed a data-quality evaluation and determined that the data-quality objectives were met (Attachment E).

Sampling results are presented in the following attachments:

- Attachment E—data quality evaluation reports
- Attachment F—2014/2015 analytical results compared to the applicable EPA and NJDEP screening levels
- Attachment G—historical analytical results compared to EPA and NJDEP screening levels
- Attachment H—figures showing shallow groundwater sampling results within 100 feet of each building

3.1 163 Old River Road

The results from the March 2015 VI monitoring event at the 163 Old River Road building confirm previous conclusions, that the VI pathway is not causing indoor air concentrations of site-related constituents to exceed EPA's guidelines for exposure to indoor air. The following observations were made from the March 2015 sampling data:

- There were no exceedances of the NJDEP Rapid Action Levels (RALs) (Attachment F-2 [B]).
- There were no exceedances of the EPA or NJDEP indoor air screening levels (IASLs) (Attachment F-2 [C-1 and C-2]).
- There were no exceedances of the EPA or NJDEP soil gas screening levels (SGSLs) (Attachment F-2 [D-1 and D-2]).

3.2 103 River Road

The results from the March 2015 VI monitoring event at the 103 River Road building confirm previous conclusions, that the VI pathway is not causing indoor air concentrations of site-related constituents to exceed EPA's guidelines for exposure to indoor air. The following observations were made from the March 2015 sampling data:

- There were no exceedances of the NJDEP RALs (Attachment F-3 [B]).
- There were no exceedances of the EPA or NJDEP IASLs (Attachment F-3 [C-1 and C-2]).
- Subslab soil gas sampling results were below EPA and NJDEP SGSLs (Attachment F-3 [D-1 and D-2]).

3.3 115 River Road

The results of the 2015 VI monitoring event in the 115 River Road occupied tenant spaces (Buildings 2 through 11) confirm previous conclusions that the VI pathway is not causing indoor air concentrations of site-related constituents to exceed EPA's regulatory guidelines for exposure to indoor air in the remaining occupied spaces of the building under current site conditions. The following observations were made from the 2015 sampling data:

- There were no exceedances of the NJDEP RALs (Attachment F-1 [B]).

- Measured VOC concentrations in the occupied tenant spaces were within the acceptable EPA IASLs target risk range (10^{-4} to 10^{-6}). Two samples (Q1-IA-32 and Q1-IA-45) exceeded the target risk of 10^{-5} for naphthalene in the occupied tenant spaces; however, comparison with the basement results below Building 10 and with historical sampling results suggests these results reflect the historical trends observed in indoor air concentrations (Attachment F-1[C]). Indoor air conditions in these buildings remain consistent with the VI conclusions presented in the 2011 ROD (EPA, 2011).
- Although there were a results with concentrations of benzene and naphthalene higher than the NJDEP IASLs, air samples collected within the occupied spaces were below or within the EPA target cancer risk range and below the hazard quotient (HQ) of 1 in the remaining occupied buildings. Additionally, observed results remained consistent with past sampling results (since sampling commenced in 2006), which have concluded that "vapor intrusion studies conducted during the RI conclude that ongoing monitoring and temporary measures have been sufficient to ensure that vapor intrusion does not currently pose an unacceptable human health risk..." (ROD, pp. 38, 39). Refer to Attachment G for historical results.
- Consistent with past events, measured concentrations of benzene, ethylbenzene, and naphthalene exceeded EPA and NJDEP IASLs in the Building 7/8 basement (Attachment F-1[C and D]). These concentrations did not exceed the NJDEP RALs. These spaces continue to remain vacant, which limits the potential for exposure. The ventilation system continues to operate to control VOCs in the basement.
- Annual VI monitoring will continue in the occupied tenant spaces at 115 River Road in accordance with the 2011 ROD and subsequent Consent Order.

SECTION 4

Conclusions

Results of the 2015 VI monitoring events at the occupied tenant spaces of the 115 River Road building, the 163 Old River building, and the 103 River Road building remain consistent with prior monitoring events and indicate that the VI pathway has not caused indoor air concentrations to exceed EPA's guidelines for exposure to indoor air. Based on the follow-up sampling results at 115 River Road, 163 Old River Road, and 103 River Road, no further action is needed at this time.

In accordance with the ROD and consent order, performance of ongoing VI monitoring is planned at the Quanta Resources Corporation Superfund Site at 115 River Road and other affected properties as part of the interim remedy. Sampling will be performed according to the agency-approved work plan (CH2M HILL, 2015). A letter will be presented to the agencies indicating approval for sampling dates in fall of 2015 and detailing any changes from the previously approved work plan (if necessary).

SECTION 5

References

CH2M HILL. 2013.*Quality Assurance Project Plan for 2013/2014 Vapor Intrusion Sampling, Quanta Resources Corporation Superfund Site, Operable Unit 1, Edgewater, New Jersey*. September.

CH2M HILL. 2014. *Work Plan for Winter 2014/2015 Vapor Intrusion Monitoring Events at 115 River Road, 163 Old River Road, and 103 River Road*. December.CH2M HILL. 2015. *Quanta Resources Corporation Superfund Site, Addendum to Operable Unit 1 (OU1) Vapor Intrusion—Work Plan for the Winter 2014/2015 Monitoring Events at 115 River Road, 163 Old River Road, and 103 River Road.* January 27.

EPA. 2002. OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance).

EPA. 2015. OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air, June 2015. (released after the sampling was completed)

EPA Office of Superfund Remediation and Technology Innovation. 2015. Vapor Intrusion Screening Level Calculator Tool, version 3.4, June 2015, using the June 2015 Regional Screening Levels.

Interstate Technology and Regulatory Council. 2007. *Vapor Intrusion Pathway: A Practical Guideline*. 2007.

NJDEP. 2013. Vapor Intrusion Technical Guidance and the associated NJDEP Vapor Intrusion Screening Level Tables. March.

NJDEP N.J.A.C. 7:26E. Technical Requirements for Site Remediation. May 2012.

Attachment A
Sampling Location Figures

LEGEND

- Quanta Property Boundary
- OU1 Boundary
- Buildings Proposed for Sampling

Notes:
1. 2014 Aerial Photography obtained from TerraServer

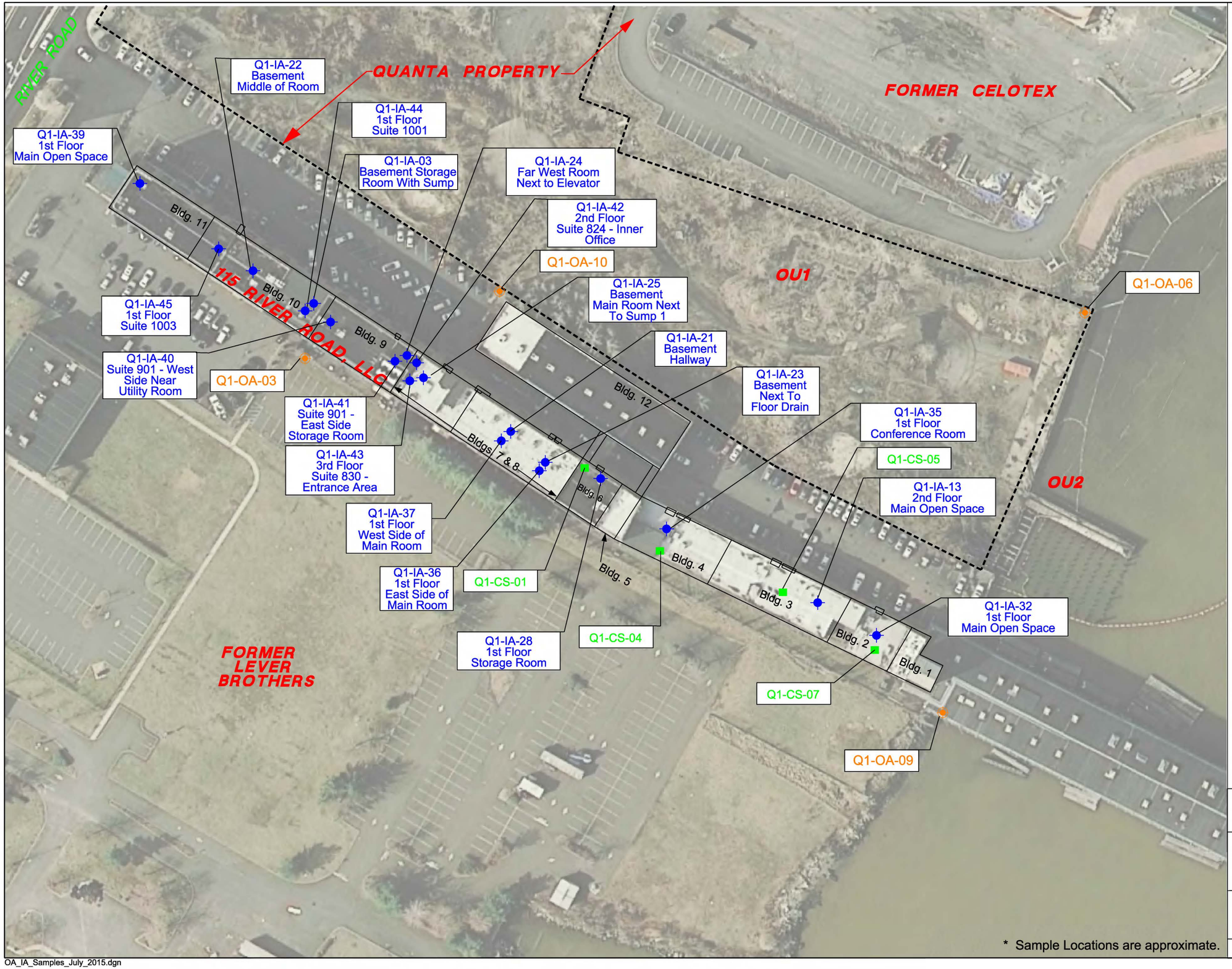
0 80 160 Feet

ch2m SM

QUANTA RESOURCE CORPORATION SUPERFUND SITE MAP

Quanta Resources Superfund Site
Operable Unit 1
Edgewater, New Jersey

July 2015 | **FIGURE 1**



LEGEND

- Quanta Property Boundary
- Q1-IA-07 — Indoor Air Sample Locations
- Q1-OA-03 — Outdoor Air Sample Locations
- Q1-CS-05 — Crawl Space Air Sample Locations

NOTES

1. Source of Aerial Photograph: NJ Office of Information Technology (NJOIT), Office of Geographic Information Systems (OGIS), 2007-2008, Scale: 1:2400 (1"=200'), March - May 2007.
2. Approximate property boundaries taken from most recent Bergen County Tax Maps.
3. For purposes of this figure property lines are not extended into the Hudson River.

N

0 40 80 120
Scale In Feet

* Sample Locations are approximate.

ch2m:

115 River Road Building
Winter 2014 - 2015
Vapor Intrusion Monitoring Event
Sampling Locations

Quanta Resources Superfund Site
115 River Road Building
Edgewater, New Jersey

July 2015 | Figure 2

OA_IA_Samples_July_2015.dgn

Parameter Name	Q1-IA-13-032615 3/26/2015	
Benzene	4.7	
Ethylbenzene	4.4	
Naphthalene	2.2	
1,2,4-Trimethylbenzene	4.7	
1,3,5-Trimethylbenzene[1]	1.8	
o-Xylene	4.8	
m&p-Xylene[2]	15	
Xylenes (total) - sum of isomers	20	

Parameter Name	Q1-IA-32-031215 3/12/2015	
Benzene	2.2	
Ethylbenzene	1.3	
Naphthalene	4.8	
1,2,4-Trimethylbenzene	0.84	
1,3,5-Trimethylbenzene[1]	0.27	
o-Xylene	0.88	
m&p-Xylene[2]	1.9	
Xylenes (total) - sum of isomers	2.8	

Parameter Name	QI-IA-28-031915 3/19/2015	
Benzene	4.3	
Ethylbenzene	2.7	
Naphthalene	0.60	
1,2,4-Trimethylbenzene	2.3	
1,3,5-Trimethylbenzene[1]	0.78	
o-Xylene	2.5	
m&p-Xylene[2]	6.2	
Xylenes (total) - sum of isomers	8.7	

Parameter Name	Q1-IA-35-031215 3/12/2015	
Benzene	3.2	
Ethylbenzene	2.5	
Naphthalene	1.5	
1,2,4-Trimethylbenzene	2.6	
1,3,5-Trimethylbenzene[1]	0.74	
o-Xylene	2.7	
m&p-Xylene[2]	6.7	
Xylenes (total) - sum of isomers	9.4	

Parameter Name	QI-IA-37-031915 3/19/2015	
Benzene	0.73	
Ethylbenzene	0.63	
Naphthalene	0.31	
1,2,4-Trimethylbenzene	27	
1,3,5-Trimethylbenzene[1]	8.1	
o-Xylene	0.99	
m&p-Xylene[2]	2.4	
Xylenes (total) - sum of isomers	3.4	

Parameter Name	Q1-DUP1-031915[a] 3/19/2015	
Benzene	1.1	
Ethylbenzene	0.61	
Naphthalene	1.5	
1,2,4-Trimethylbenzene	0.97	
1,3,5-Trimethylbenzene[1]	0.33	
o-Xylene	0.82	
m&p-Xylene[2]	2.0	
Xylenes (total) - sum of isomers	2.8	

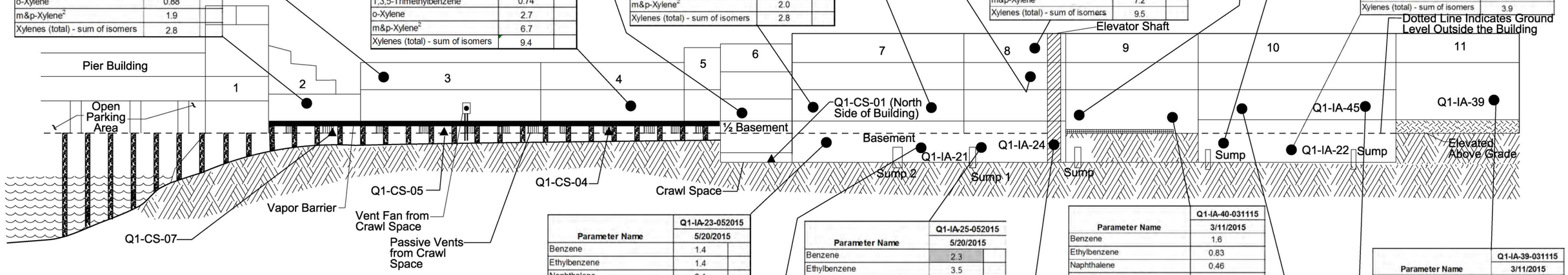
Parameter Name	Q1-IA-42-031115 3/11/2015	
Benzene	1.6	
Ethylbenzene	1.8	
Naphthalene	0.90	
1,2,4-Trimethylbenzene	1.7	
1,3,5-Trimethylbenzene[1]	0.46	
o-Xylene	2.3	
m&p-Xylene[2]	7.2	
Xylenes (total) - sum of isomers	9.5	

Parameter Name	Q1-IA-43-031115 3/11/2015	
Benzene	1.9	
Ethylbenzene	2.3	
Naphthalene	1.8	
1,2,4-Trimethylbenzene	1.8	
1,3,5-Trimethylbenzene[1]	0.52	
o-Xylene	2.3	
m&p-Xylene[2]	7.2	
Xylenes (total) - sum of isomers	9.5	

Parameter Name	Q1-IA-41-031215 3/12/2015	
Benzene	0.59	
Ethylbenzene	0.31	
Naphthalene	0.055	
1,2,4-Trimethylbenzene	0.21	
1,3,5-Trimethylbenzene[1]	0.071	J
o-Xylene	0.33	
m&p-Xylene[2]	0.82	
Xylenes (total) - sum of isomers	1.15	

Parameter Name	Q1-IA-03-031015 3/10/2015	
Benzene	2.1	
Ethylbenzene	1.2	
Naphthalene	1.2	
1,2,4-Trimethylbenzene	0.82	
1,3,5-Trimethylbenzene[1]	0.24	
o-Xylene	0.96	
m&p-Xylene[2]	2.2	
Xylenes (total) - sum of isomers	3.2	

Parameter Name	Q1-IA-22-031115 3/11/2015	
Benzene	2.5	
Ethylbenzene	1.5	
Naphthalene	1.8	
1,2,4-Trimethylbenzene	1.3	
1,3,5-Trimethylbenzene[1]	0.46	
o-Xylene	1.2	
m&p-Xylene[2]	2.7	
Xylenes (total) - sum of isomers	3.9	



Parameter Name	Q1-IA-23-052015 5/20/2015	
Benzene	1.4	
Ethylbenzene	1.4	
Naphthalene	2.1	
1,2,4-Trimethylbenzene	1.5	
1,3,5-Trimethylbenzene[1]	0.43	
o-Xylene	1.6	
m&p-Xylene[2]	4.7	
Xylenes (total) - sum of isomers	6.3	

Parameter Name	Q1-IA-25-052015 5/20/2015	
Benzene	2.3	
Ethylbenzene	3.5	
Naphthalene	18	D
1,2,4-Trimethylbenzene	1.8	
1,3,5-Trimethylbenzene[1]	0.55	
o-Xylene	2.0	
m&p-Xylene[2]	3.8	
Xylenes (total) - sum of isomers	5.8	

Parameter Name	Q1-IA-40-031115 3/11/2015
Benzene	1.6
Ethylbenzene	0.83
Naphthalene	0.46
1,2,4-Trimethylbenzene	0.93
1,3,5-Trimethylbenzene[1]	0.29
o-Xylene	0.89
m&p-Xylene[2]	2.2
Xylenes (total) - sum of isomers	3.1

Parameter Name	Q1-IA-39-031115 3/11/2015	
Benzene	1.9	
Ethylbenzene	0.93	
Naphthalene	0.56	
1,2,4-Trimethylbenzene	0.86	
1,3,5-Trimethylbenzene[1]	0.28	
o-Xylene	0.99	
m&p-Xylene[2]	3.4	
Xylenes (total) - sum of isomers	4.4	

Parameter Name	Q1-IA-21-052015 5/20/2015		Q1-DUP2-052015 5/20/2015	
Benzene	1.6		1.9	
Ethylbenzene	2.1		2.3	
Naphthalene	9.5	J	14	J
1,2,4-Trimethylbenzene	1.2	J	1.7	J
1,3,5-Trimethylbenzene[1]	0.36		0.49	
o-Xylene	1.3		1.7	
m&p-Xylene[2]	2.6		3.5	
Xylenes (total) - sum of isomers	3.9		5.2	

Parameter Name	Q1-IA-24-052015 5/20/2015		Q1-DUP4-052015 5/20/2015	
Benzene	3.3		3.1	
Ethylbenzene	5.3		4.8	
Naphthalene	22	D	20	D
1,2,4-Trimethylbenzene	5.7	J	2.5	J
1,3,5-Trimethylbenzene[1]	1.4	J	0.84	J
o-Xylene	3.9	J	2.7	J
m&p-Xylene[2]	8.1	J	5.1	J
Xylenes (total) - sum of isomers	12		7.8	

Parameter Name	Q1-IA-44-031115 3/11/2015
Benzene	2.4
Ethylbenzene	1.3
Naphthalene	0.3
1,2,4-Trimethylbenzene	1.1
1,3,5-Trimethylbenzene[1]	0.32
o-Xylene	1.4
m&p-Xylene[2]	4.4
Xylenes (total) - sum of isomers	5.8

Parameter Name	Q1-IA-45-031115 3/11/2015	
Benzene	3.0	
Ethylbenzene	1.9	
Naphthalene	4.8	
1,2,4-Trimethylbenzene	1.6	
1,3,5-Trimethylbenzene[1]	0.60	
o-Xylene	1.5	
m&p-Xylene[2]	3.0	
Xylenes (total) - sum of isomers	4.5	

Cas #	Parameter Name	EPA Industrial IASLs 10^{-5} Target Risk (µg/m³)	EPA Industrial IASLs HQ=1 Target Risk (µg/m³)	For Reference Only 10^{-6} Target Risk (µg/m³)	For Reference Only 10^{-4} Target Risk (µg/m³)	NJDEP Nonresidential IASL (µg/m³)	Range of Outdoor Air Data 103 RR, 115 RR, and 163 ORR (µg/m³)
71-43-2	Benzene	16	130	1.6	160	2	0.49 - 1.6
100-41-4	Ethylbenzene	49	4,400	4.9	490	5	0.11 J - 0.77
91-20-3	Naphthalene	3.6	13	0.36	36	3	0.032 - 1.5
95-63-6	1,2,4-Trimethylbenzene	NA	31	NA	NA	Not Available	0.13 - 1.2
108-67-8	1,3,5-Trimethylbenzene[1]	NA	31	NA	NA	Not Available	0.034 J - 0.39
108-38-3	o-Xylene	NA	440	NA	NA	Not Available	0.13 - 1.1
NA	m&p-Xylene[2]	Not Available				Not Available	0.32 - 2.8
1330-20-7	Xylenes (total) - sum of isomers	NA	440	NA	NA	440	0.45 - 3.9

Notes:

0.63 Bold and shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a]= The parent sample collected at this location in March 2015 was not analyzed because the canister leaked during shipment.

LEGEND

● Q1-IA-07 Indoor Air Sample Locations

▲ Q1-CS-07 Crawl Space Air Sample Locations

NOTES

Building lengths approximately to scale.
Other building features not to scale.

Sample locations are approximate.

0 25 50 75
Scale In Feet

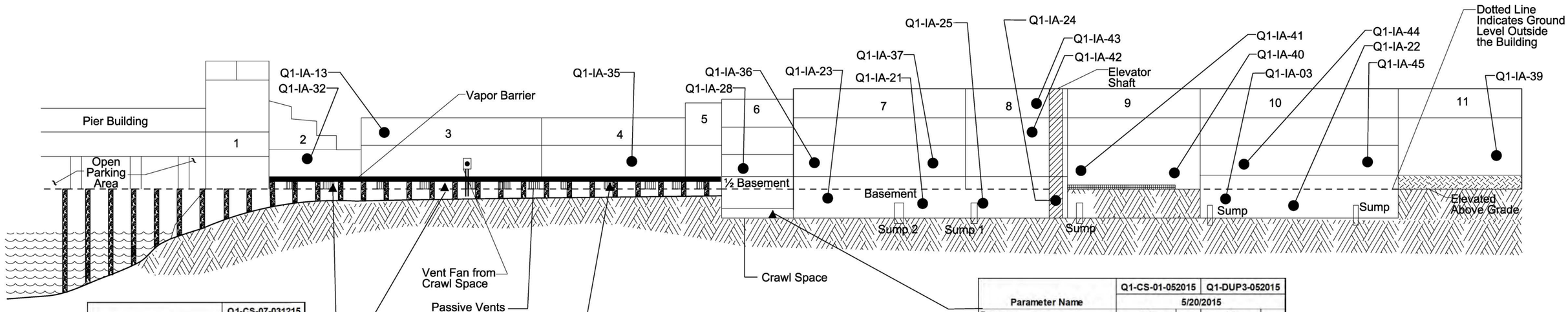
ch2m:

115 River Road Building
Vapor Intrusion Monitoring Event
Indoor Air Sample Locations

Quanta Resources Superfund Site
115 River Road Building
Edgewater, New Jersey

July 2015 | Figure 3

PHL | NDM | HONEYWELL INT_VAPOR INTRUSION | DELIVERABLES | 115_RR_Indoor_Air.dgn



Parameter Name	Q1-CS-07-031215 3/12/2015	
Benzene	0.75	
Ethylbenzene	0.33	
Naphthalene	0.28	
1,2,4-Trimethylbenzene	0.38	
1,3,5-Trimethylbenzene[1]	0.11	J
o-Xylene	0.39	
m&p-Xylene[2]	1.1	
Xylenes (total) - sum of isomers	1.5	

Parameter Name	Q1-CS-05-031215 3/12/2015	
Benzene	3.2	
Ethylbenzene	5.4	
Naphthalene	1.8	
1,2,4-Trimethylbenzene	1.6	
1,3,5-Trimethylbenzene[1]	0.55	
o-Xylene	1.7	
m&p-Xylene[2]	3.6	
Xylenes (total) - sum of isomers	5.3	

Parameter Name	Q1-CS-04-031215 3/12/2015	
Benzene	3.3	
Ethylbenzene	1.3	
Naphthalene	0.36	
1,2,4-Trimethylbenzene	1.5	
1,3,5-Trimethylbenzene[1]	0.38	
o-Xylene	1.3	
m&p-Xylene[2]	3.8	
Xylenes (total) - sum of isomers	5.1	

Parameter Name	Q1-CS-01-052015 5/20/2015		Q1-DUP3-052015 5/20/2015	
Benzene	1.6		1.6	
Ethylbenzene	1.7		1.8	
Naphthalene	1.9		2.4	
1,2,4-Trimethylbenzene	1.6		1.6	
1,3,5-Trimethylbenzene[1]	0.42		0.43	
o-Xylene	1.9		1.9	
m&p-Xylene[2]	5.5		5.6	
Xylenes (total) - sum of isomers	7.4		7.5	

Cas #	Parameter Name	EPA Industrial IASLs 10^{-5} Target Risk (µg/m³)	EPA Industrial IASLs HQ=1 Target Risk (µg/m³)	For Reference Only 10^{-6} Target Risk (µg/m³)	For Reference Only 10^{-4} Target Risk (µg/m³)	NJDEP Nonresidential IASL (µg/m³)	Range of Outdoor Air Data 103 RR, 115 RR, and 163 ORR (µg/m³)
71-43-2	Benzene	16	130	1.6	160	2	0.49 - 1.6
100-41-4	Ethylbenzene	49	4,400	4.9	490	5	0.11 J - 0.77
91-20-3	Naphthalene	3.6	13	0.36	36	3	0.032 - 1.5
95-63-6	1,2,4-Trimethylbenzene	NA	31	NA	NA	Not Available	0.13 - 1.2
108-67-8	1,3,5-Trimethylbenzene[1]	NA	31	NA	NA	Not Available	0.034 J - 0.39
108-38-3	o-Xylene	NA	440	NA	NA	Not Available	0.13 - 1.1
NA	m&p-Xylene[2]	Not Available				Not Available	0.32 - 2.8
1330-20-7	Xylenes (total) - sum of isomers	NA	440	NA	NA	440	0.45 - 3.9

Notes:

0.63 Bold and shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a]= The parent sample collected at this location in March 2015 was not analyzed because the canister leaked during shipment.

LEGEND

● Q1-IA-07 Indoor Air Sample Locations

▲ Q1-CS-07 Crawl Space Air Sample Locations

NOTES

Building lengths approximately to scale. Other building features not to scale.

Sample locations are approximate.

0 25 50 75

Scale In Feet

ch2m:

115 River Road Building
Vapor Intrusion Monitoring Event
Crawl Space Air Sample Locations

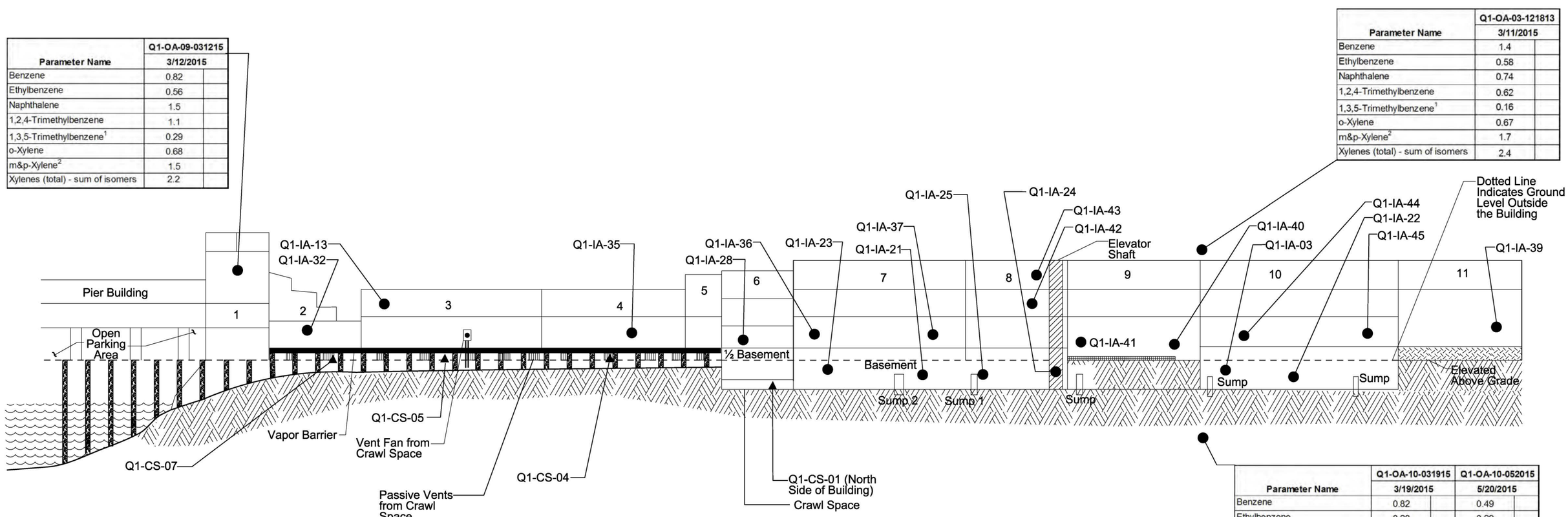
Quanta Resources Superfund Site
115 River Road Building
Edgewater, New Jersey

July 2015 | Figure 4

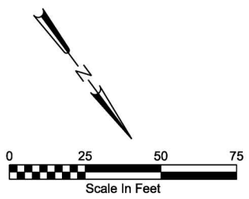
PHL | NDM | HONEYWELL INT_VAPOR INTRUSION | DELIVERABLES | 115_RR_Crawl_Space.dgn

Parameter Name	Q1-OA-09-031215 3/12/2015	
Benzene	0.82	
Ethylbenzene	0.56	
Naphthalene	1.5	
1,2,4-Trimethylbenzene	1.1	
1,3,5-Trimethylbenzene[1]	0.29	
o-Xylene	0.68	
m&p-Xylene[2]	1.5	
Xylenes (total) - sum of isomers	2.2	

Parameter Name	Q1-OA-03-121813 3/11/2015	
Benzene	1.4	
Ethylbenzene	0.58	
Naphthalene	0.74	
1,2,4-Trimethylbenzene	0.62	
1,3,5-Trimethylbenzene[1]	0.16	
o-Xylene	0.67	
m&p-Xylene[2]	1.7	
Xylenes (total) - sum of isomers	2.4	



Parameter Name	Q1-OA-10-031915 3/19/2015		Q1-OA-10-052015 5/20/2015	
Benzene	0.82		0.49	
Ethylbenzene	0.20		0.29	
Naphthalene	0.11		0.36	
1,2,4-Trimethylbenzene	0.25		0.33	
1,3,5-Trimethylbenzene[1]	0.074		0.099	J
o-Xylene	0.24		0.33	
m&p-Xylene[2]	0.63		0.83	
Xylenes (total) - sum of isomers	0.87		1.2	



Cas #	Parameter Name	Range of Outdoor Air Data 103 RR, 115 RR, and 163 ORR (µg/m³)
71-43-2	Benzene	0.49 - 1.6
100-41-4	Ethylbenzene	0.11 J - 0.77
91-20-3	Naphthalene	0.032 - 1.5
95-63-6	1,2,4-Trimethylbenzene	0.13 - 1.2
108-67-8	1,3,5-Trimethylbenzene[1]	0.034 J - 0.39
108-38-3	o-Xylene	0.13 - 1.1
NA	m&p-Xylene[2]	0.32 - 2.8
1330-20-7	Xylenes (total) - sum of isomers	0.45 - 3.9

LEGEND

● Q1-OA-09 Outdoor Air Sample Locations

▲ Q1-CS-07 Crawl Space Air Sample Locations

NOTES

Building lengths approximately to scale. Other building features not to scale.

Sample locations are approximate.

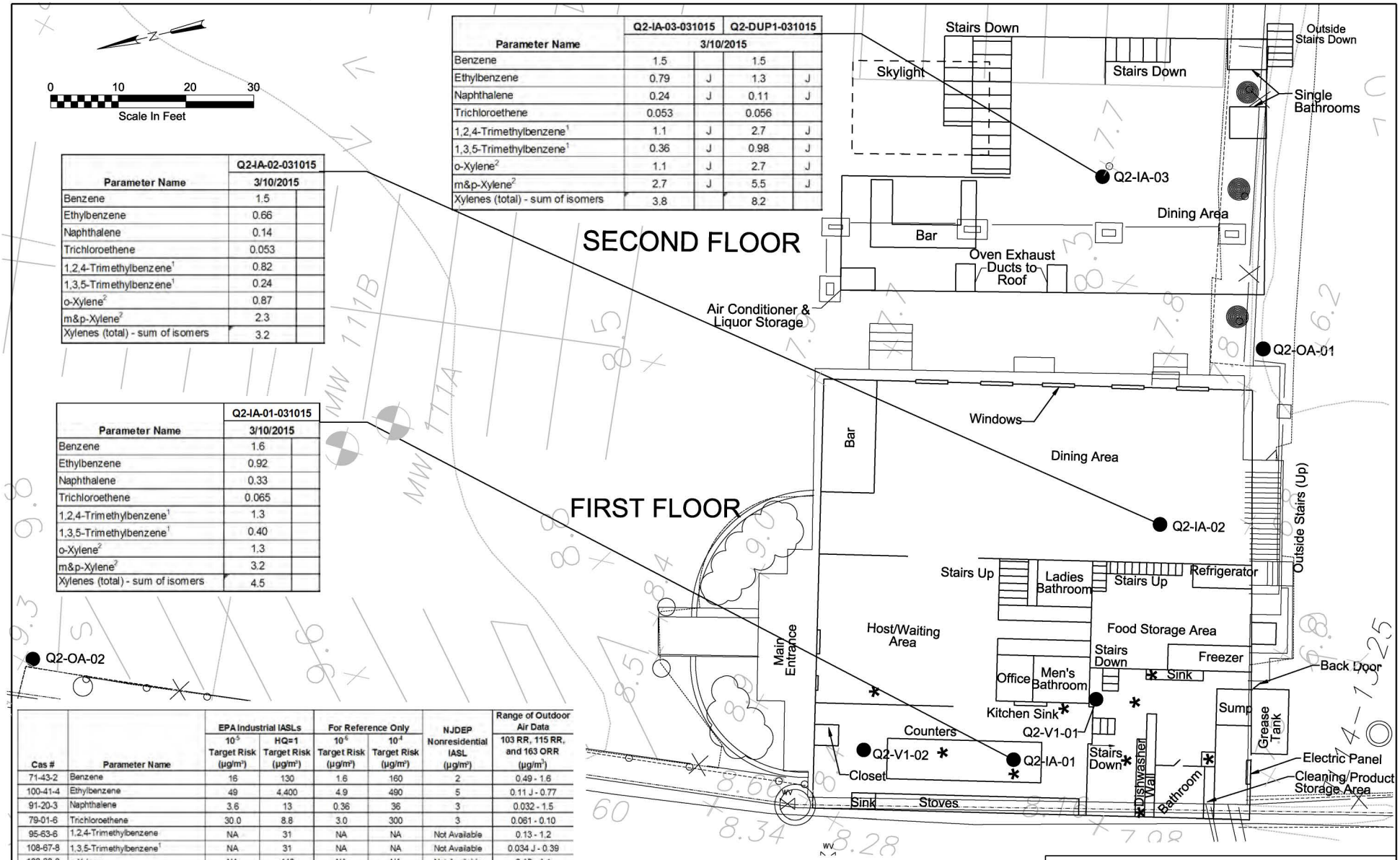
ch2m

115 River Road Building
Vapor Intrusion Monitoring Event
Outdoor Air Sample Locations

Quanta Resources Superfund Site
115 River Road Building
Edgewater, New Jersey

July 2015 | Figure 5

PHL | NDM | HONEYWELL INT_VAPOR INTRUSION | DELIVERABLES | 115_RR_Outdoor_Air.dgn



Parameter Name	Q2-IA-03-031015 3/10/2015		Q2-DUP1-031015 3/10/2015	
Benzene	1.5		1.5	
Ethylbenzene	0.79	J	1.3	J
Naphthalene	0.24	J	0.11	J
Trichloroethene	0.053		0.056	
1,2,4-Trimethylbenzene[1]	1.1	J	2.7	J
1,3,5-Trimethylbenzene[1]	0.36	J	0.98	J
o-Xylene[2]	1.1	J	2.7	J
m&p-Xylene[2]	2.7	J	5.5	J
Xylenes (total) - sum of isomers	3.8		8.2	

Parameter Name	Q2-IA-02-031015 3/10/2015	
Benzene	1.5	
Ethylbenzene	0.66	
Naphthalene	0.14	
Trichloroethene	0.053	
1,2,4-Trimethylbenzene[1]	0.82	
1,3,5-Trimethylbenzene[1]	0.24	
o-Xylene[2]	0.87	
m&p-Xylene[2]	2.3	
Xylenes (total) - sum of isomers	3.2	

Parameter Name	Q2-IA-01-031015 3/10/2015	
Benzene	1.6	
Ethylbenzene	0.92	
Naphthalene	0.33	
Trichloroethene	0.065	
1,2,4-Trimethylbenzene[1]	1.3	
1,3,5-Trimethylbenzene[1]	0.40	
o-Xylene[2]	1.3	
m&p-Xylene[2]	3.2	
Xylenes (total) - sum of isomers	4.5	

Cas #	Parameter Name	EPA Industrial IASLs 10^{-5} Target Risk (µg/m³)	EPA Industrial IASLs HQ=1 Target Risk (µg/m³)	For Reference Only 10^{-6} Target Risk (µg/m³)	For Reference Only 10^{-4} Target Risk (µg/m³)	NJDEP Nonresidential IASL (µg/m³)	Range of Outdoor Air Data 103 RR, 115 RR, and 163 ORR (µg/m³)
71-43-2	Benzene	16	130	1.6	160	2	0.49 - 1.6
100-41-4	Ethylbenzene	49	4,400	4.9	490	5	0.11 J - 0.77
91-20-3	Naphthalene	3.6	13	0.36	36	3	0.032 - 1.5
79-01-6	Trichloroethene	30.0	8.8	3.0	300	3	0.061 - 0.10
95-63-6	1,2,4-Trimethylbenzene	NA	31	NA	NA	Not Available	0.13 - 1.2
108-67-8	1,3,5-Trimethylbenzene[1]	NA	31	NA	NA	Not Available	0.034 J - 0.39
108-38-3	o-Xylene	NA	440	NA	NA	Not Available	0.13 - 1.1
NA	m&p-Xylene[2]	Not Available				Not Available	0.32 - 2.8
1330-20-7	Xylenes (total) - sum of isomers	NA	440	NA	NA	440	0.45 - 3.9

Notes:

0.63 Bold and shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a]= The parent sample collected at this location in March 2015 was not analyzed because the canister leaked during shipment.

LEGEND

● Q2-IA-01 Indoor Air Sample Locations

NOTES

* Floor Drains

Sample locations are approximate.

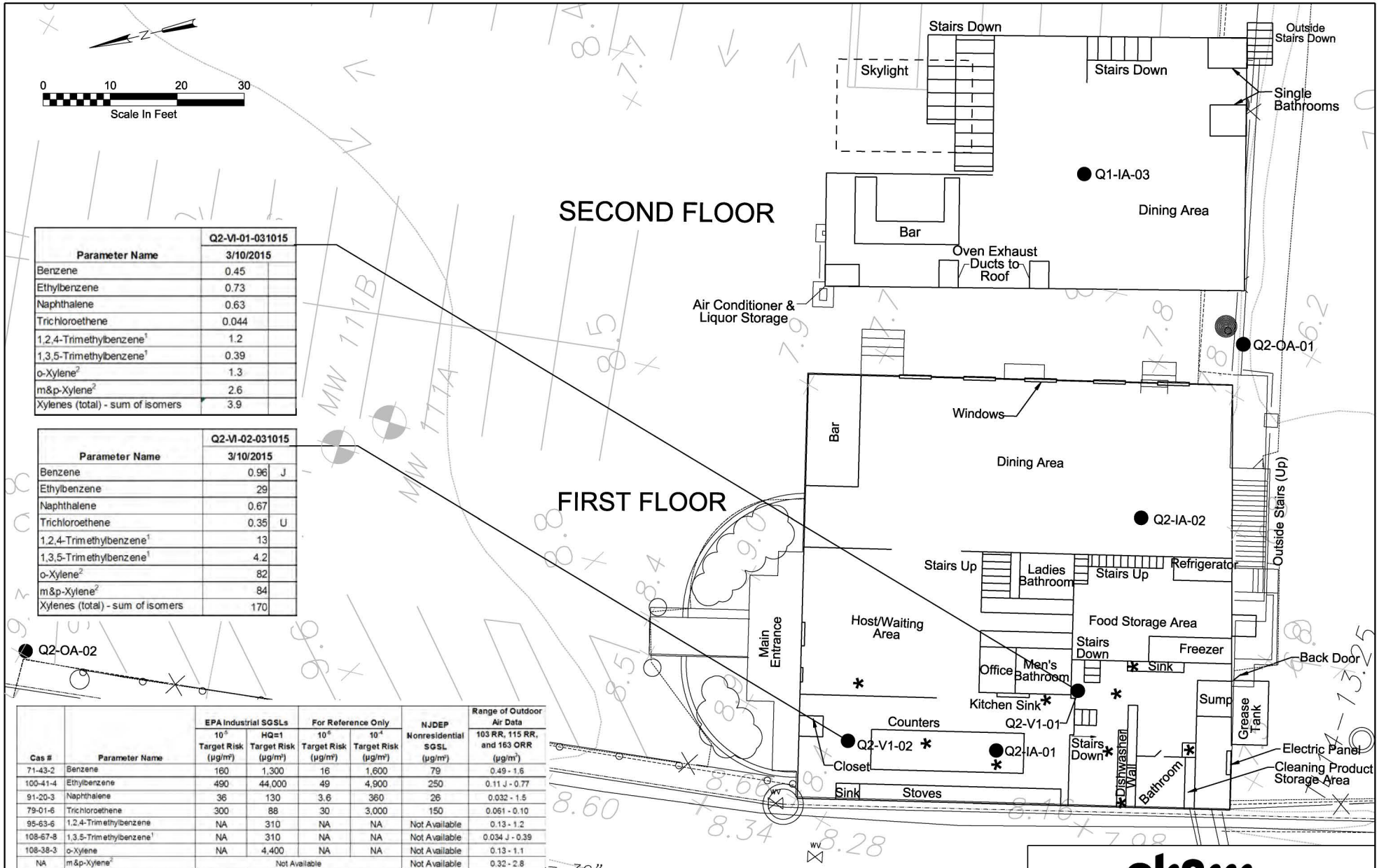
ch2m.

163 Old River Road Building
Vapor Intrusion Monitoring Event
Indoor Air Sample Locations

Quanta Resources Superfund Site
163 Old River Road Building
Edgewater, New Jersey

July 2015 | Figure 6

PHL | NDM | HONEYWELL INT_VAPOR INTRUSION | DELIVERABLES | 163_RR_Indoor_Air.dgn



Parameter Name	Q2-VI-01-031015 3/10/2015	
Benzene	0.45	
Ethylbenzene	0.73	
Naphthalene	0.63	
Trichloroethene	0.044	
1,2,4-Trimethylbenzene[1]	1.2	
1,3,5-Trimethylbenzene[1]	0.39	
o-Xylene[2]	1.3	
m&p-Xylene[2]	2.6	
Xylenes (total) - sum of isomers	3.9	

Parameter Name	Q2-VI-02-031015 3/10/2015	
Benzene	0.96	J
Ethylbenzene	29	
Naphthalene	0.67	
Trichloroethene	0.35	U
1,2,4-Trimethylbenzene[1]	13	
1,3,5-Trimethylbenzene[1]	4.2	
o-Xylene[2]	82	
m&p-Xylene[2]	84	
Xylenes (total) - sum of isomers	170	

Cas #	Parameter Name	EPA Industrial SGSLs 10^{-5} Target Risk ($\mu g/m^3$)	EPA Industrial SGSLs HQ=1 Target Risk ($\mu g/m^3$)	For Reference Only 10^{-6} Target Risk ($\mu g/m^3$)	For Reference Only 10^{-4} Target Risk ($\mu g/m^3$)	NJDEP Nonresidential SGSL ($\mu g/m^3$)	Range of Outdoor Air Data 103 RR, 115 RR, and 163 ORR ($\mu g/m^3$)
71-43-2	Benzene	160	1,300	16	1,600	79	0.49 - 1.6
100-41-4	Ethylbenzene	490	44,000	49	4,900	250	0.11 J - 0.77
91-20-3	Naphthalene	36	130	3.6	360	26	0.032 - 1.5
79-01-6	Trichloroethene	300	88	30	3,000	150	0.061 - 0.10
95-63-6	1,2,4-Trimethylbenzene	NA	310	NA	NA	Not Available	0.13 - 1.2
108-67-8	1,3,5-Trimethylbenzene[1]	NA	310	NA	NA	Not Available	0.034 J - 0.39
108-38-3	o-Xylene	NA	4,400	NA	NA	Not Available	0.13 - 1.1
NA	m&p-Xylene[2]	Not Available				Not Available	0.32 - 2.8
1330-20-7	Xylenes (total) - sum of isomers	NA	4,400	NA	NA	22,000	0.45 - 3.9

Notes:

0.63 Bold and shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a]= The parent sample collected at this location in March 2015 was not analyzed because the canister leaked during shipment.

LEGEND

● Q2-V1-02 Subslab Sample Locations

NOTES

* Floor Drains

Sample locations are approximate.

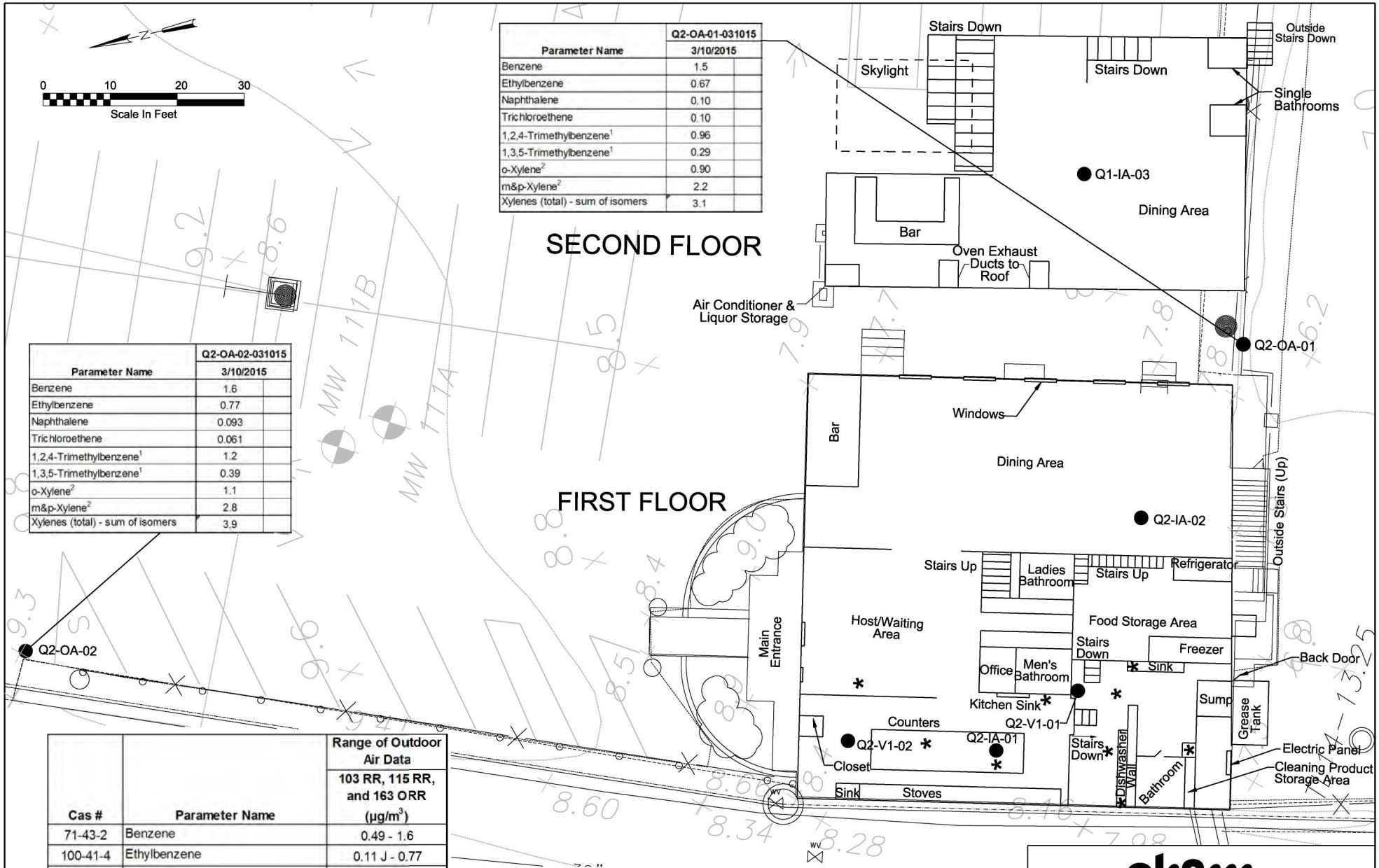
ch2m:

163 Old River Road Building
Vapor Intrusion Monitoring Event
Subslab Air Sample Locations

Quanta Resources Superfund Site
163 Old River Road Building
Edgewater, New Jersey

July 2015 | Figure 7

PHL | NDM | HONEYWELL INT_VAPOR INTRUSION | DELIVERABLES | 163_RR_Subslab.dgn



Parameter Name	Q2-OA-01-031015 3/10/2015
Benzene	1.5
Ethylbenzene	0.67
Naphthalene	0.10
Trichloroethene	0.10
1,2,4-Trimethylbenzene[1]	0.96
1,3,5-Trimethylbenzene[1]	0.29
o-Xylene[2]	0.90
m&p-Xylene[2]	2.2
Xylenes (total) - sum of isomers	3.1

Parameter Name	Q2-OA-02-031015 3/10/2015
Benzene	1.6
Ethylbenzene	0.77
Naphthalene	0.093
Trichloroethene	0.061
1,2,4-Trimethylbenzene[1]	1.2
1,3,5-Trimethylbenzene[1]	0.39
o-Xylene[2]	1.1
m&p-Xylene[2]	2.8
Xylenes (total) - sum of isomers	3.9

Cas #	Parameter Name	Range of Outdoor Air Data 103 RR, 115 RR, and 163 ORR (µg/m^3)
71-43-2	Benzene	0.49 - 1.6
100-41-4	Ethylbenzene	0.11 J - 0.77
91-20-3	Naphthalene	0.032 - 1.5
79-01-6	Trichloroethene	0.061 - 0.10
95-63-6	1,2,4-Trimethylbenzene	0.13 - 1.2
108-67-8	1,3,5-Trimethylbenzene[1]	0.034 J - 0.39
108-38-3	o-Xylene	0.13 - 1.1
NA	m&p-Xylene[2]	0.32 - 2.8
1330-20-7	Xylenes (total) - sum of isomers	0.45 - 3.9

LEGEND

● Q2-OA-01 Outdoor Air Sample Locations

NOTES

* Floor Drains

Sample locations are approximate.

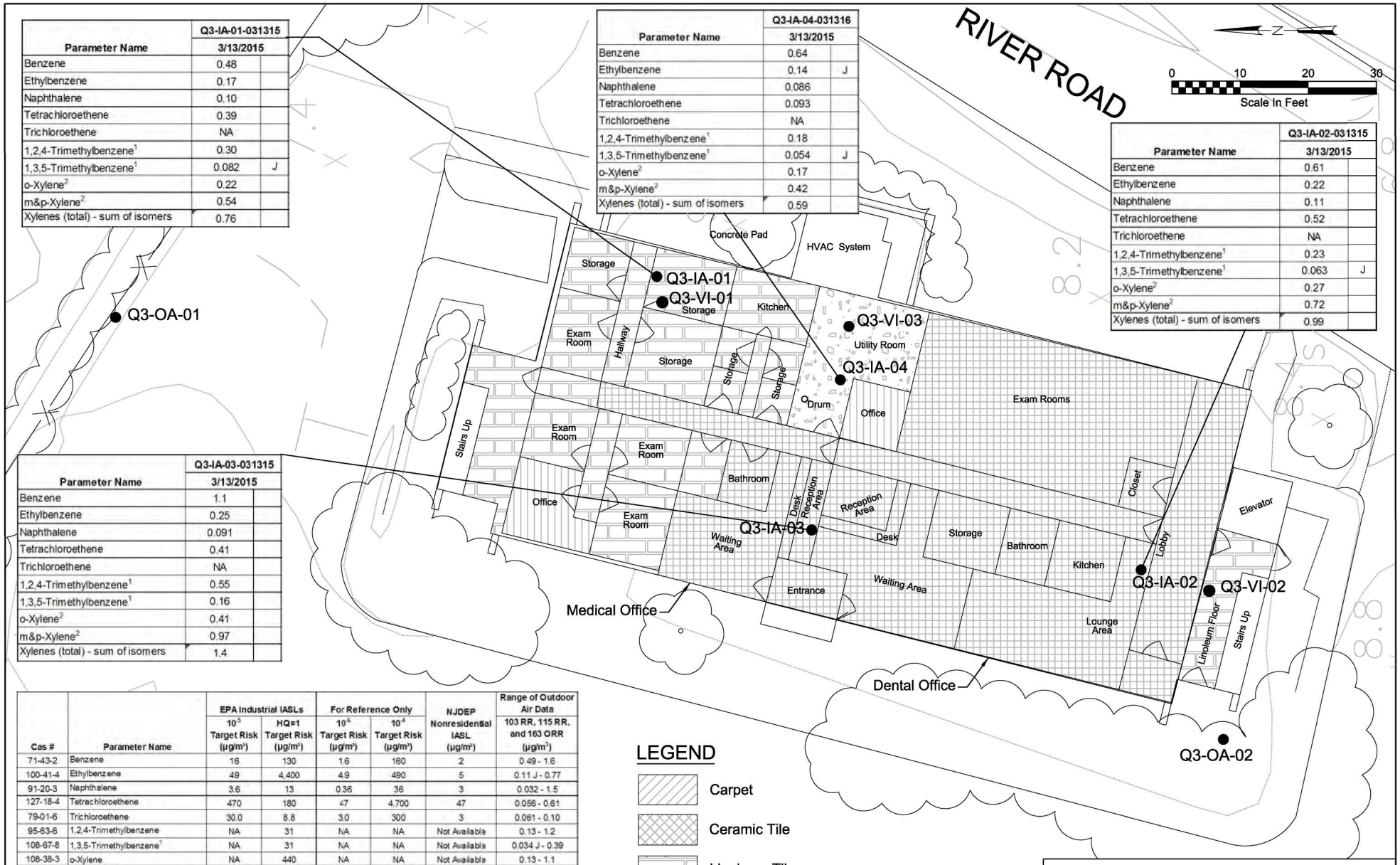
ch2m:

163 Old River Road Building
Vapor Intrusion Monitoring Event
Outdoor Air Sample Locations

Quanta Resources Superfund Site
163 Old River Road Building
Edgewater, New Jersey

July 2015 | Figure 8

PHL | NDM | HONEYWELL INT_VAPOR INTRUSION | DELIVERABLES | 163_RR_Outdoor_Air.dgn



Parameter Name	Q3-IA-01-031315 3/13/2015	
Benzene	0.48	
Ethylbenzene	0.17	
Naphthalene	0.10	
Tetrachloroethene	0.39	
Trichloroethene	NA	
1,2,4-Trimethylbenzene[1]	0.30	
1,3,5-Trimethylbenzene[1]	0.082	J
o-Xylene[2]	0.22	
m&p-Xylene[2]	0.54	
Xylenes (total) - sum of isomers	0.76	

Parameter Name	Q3-IA-04-031316 3/13/2015	
Benzene	0.64	
Ethylbenzene	0.14	J
Naphthalene	0.086	
Tetrachloroethene	0.093	
Trichloroethene	NA	
1,2,4-Trimethylbenzene[1]	0.18	
1,3,5-Trimethylbenzene[1]	0.054	J
o-Xylene[2]	0.17	
m&p-Xylene[2]	0.42	
Xylenes (total) - sum of isomers	0.59	

Parameter Name	Q3-IA-02-031315 3/13/2015	
Benzene	0.61	
Ethylbenzene	0.22	
Naphthalene	0.11	
Tetrachloroethene	0.52	
Trichloroethene	NA	
1,2,4-Trimethylbenzene[1]	0.23	
1,3,5-Trimethylbenzene[1]	0.063	J
o-Xylene[2]	0.27	
m&p-Xylene[2]	0.72	
Xylenes (total) - sum of isomers	0.99	

Parameter Name	Q3-IA-03-031315 3/13/2015	
Benzene	1.1	
Ethylbenzene	0.25	
Naphthalene	0.091	
Tetrachloroethene	0.41	
Trichloroethene	NA	
1,2,4-Trimethylbenzene[1]	0.55	
1,3,5-Trimethylbenzene[1]	0.16	
o-Xylene[2]	0.41	
m&p-Xylene[2]	0.97	
Xylenes (total) - sum of isomers	1.4	

Cas #	Parameter Name	EPA Industrial IASLs 10^{-5} Target Risk (µg/m³)	EPA Industrial IASLs HQ=1 Target Risk (µg/m³)	For Reference Only 10^{-6} Target Risk (µg/m³)	For Reference Only 10^{-4} Target Risk (µg/m³)	NJDEP Nonresidential IASL (µg/m³)	Range of Outdoor Air Data 103 RR, 115 RR, and 163 ORR (µg/m³)
71-43-2	Benzene	16	130	1.6	160	2	0.49 - 1.6
100-41-4	Ethylbenzene	49	4,400	4.9	490	5	0.11 J - 0.77
91-20-3	Naphthalene	3.6	13	0.36	36	3	0.032 - 1.5
127-18-4	Tetrachloroethene	470	180	47	4,700	47	0.056 - 0.61
79-01-6	Trichloroethene	30.0	8.8	3.0	300	3	0.061 - 0.10
95-63-6	1,2,4-Trimethylbenzene	NA	31	NA	NA	Not Available	0.13 - 1.2
108-67-8	1,3,5-Trimethylbenzene[1]	NA	31	NA	NA	Not Available	0.034 J - 0.39
108-38-3	o-Xylene	NA	440	NA	NA	Not Available	0.13 - 1.1
NA	m&p-Xylene[2]	Not Available				Not Available	0.32 - 2.8
1330-20-7	Xylenes (total) - sum of isomers	NA	440	NA	NA	440	0.45 - 3.9

Notes:

0.63 Bold and shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[4]= The parent sample collected at this location in March 2015 was not analyzed because the canister leaked during shipment.

LEGEND

- Carpet
- Ceramic Tile
- Linoleum Tile
- Bare Concrete

NOTES

Sample locations are approximate.

Medical office room locations are close to scale.
Dental office room locations are approximate.

ch2m

103 River Road Building
Vapor Intrusion Monitoring Event
Indoor Air Sample Locations

Quanta Resources Site
103 Old River Road Building
Edgewater, New Jersey

July 2015 | Figure 9

PHL | NDM | HONEYWELL INT_VAPOR INTRUSION | DELIVERABLES | 103_RR_Indoor_Air.dgn

Parameter Name	Q3-VI-01-031315 3/13/2015	
Benzene	0.42	
Ethylbenzene	0.63	
Naphthalene	0.47	
Tetrachloroethene	0.76	
Trichloroethene	NA	
1,2,4-Trimethylbenzene[1]	0.80	
1,3,5-Trimethylbenzene[1]	0.22	
o-Xylene[2]	0.63	
m&p-Xylene[2]	2.0	
Xylenes (total) - sum of isomers	2.6	

Parameter Name	Q3-VI-02-031315 3/13/2015	
Benzene	0.44	
Ethylbenzene	0.31	
Naphthalene	0.22	
Tetrachloroethene	0.40	
Trichloroethene	NA	
1,2,4-Trimethylbenzene[1]	0.41	
1,3,5-Trimethylbenzene[1]	0.12	J
o-Xylene[2]	0.38	
m&p-Xylene[2]	0.98	
Xylenes (total) - sum of isomers	1.4	

Parameter Name	Q3-VI-03-031315 3/13/2015		Q3-DUP1-031315 3/13/2015	
Benzene	0.54		0.58	
Ethylbenzene	0.23		0.28	
Naphthalene	0.16		0.19	
Tetrachloroethene	0.10		0.13	
Trichloroethene	NA		NA	
1,2,4-Trimethylbenzene[1]	0.40		0.48	
1,3,5-Trimethylbenzene[1]	0.12		0.13	
o-Xylene[2]	0.30		0.36	
m&p-Xylene[2]	0.71		0.82	
Xylenes (total) - sum of isomers	1.01		1.2	

Cas #	Parameter Name	EPA Industrial SGSLs 10^{-5} Target Risk (µg/m³)	EPA Industrial SGSLs HQ=1 Target Risk (µg/m³)	For Reference Only 10^{-6} Target Risk (µg/m³)	For Reference Only 10^{-4} Target Risk (µg/m³)	NJDEP Nonresidential SGSL (µg/m³)	Range of Outdoor Air Data 103 RR, 115 RR, and 163 ORR (µg/m³)
71-43-2	Benzene	160	1,300	16	1,600	79	0.49 - 1.6
100-41-4	Ethylbenzene	490	44,000	49	4,900	250	0.11 J - 0.77
91-20-3	Naphthalene	36	130	3.6	360	26	0.032 - 1.5
127-18-4	Tetrachloroethene	4700	1,800	470	47,000	2,400	0.056 - 0.61
79-01-6	Trichloroethene	300	88	30	3,000	150	0.061 - 0.10
95-63-6	1,2,4-Trimethylbenzene	NA	310	NA	NA	Not Available	0.13 - 1.2
108-67-8	1,3,5-Trimethylbenzene[1]	NA	310	NA	NA	Not Available	0.034 J - 0.39
108-38-3	o-Xylene	NA	4,400	NA	NA	Not Available	0.13 - 1.1
NA	m&p-Xylene[2]	Not Available				Not Available	0.32 - 2.8
1330-20-7	Xylenes (total) - sum of isomers	NA	4,400	NA	NA	22,000	0.45 - 3.9

Notes:

0.63 Bold and shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

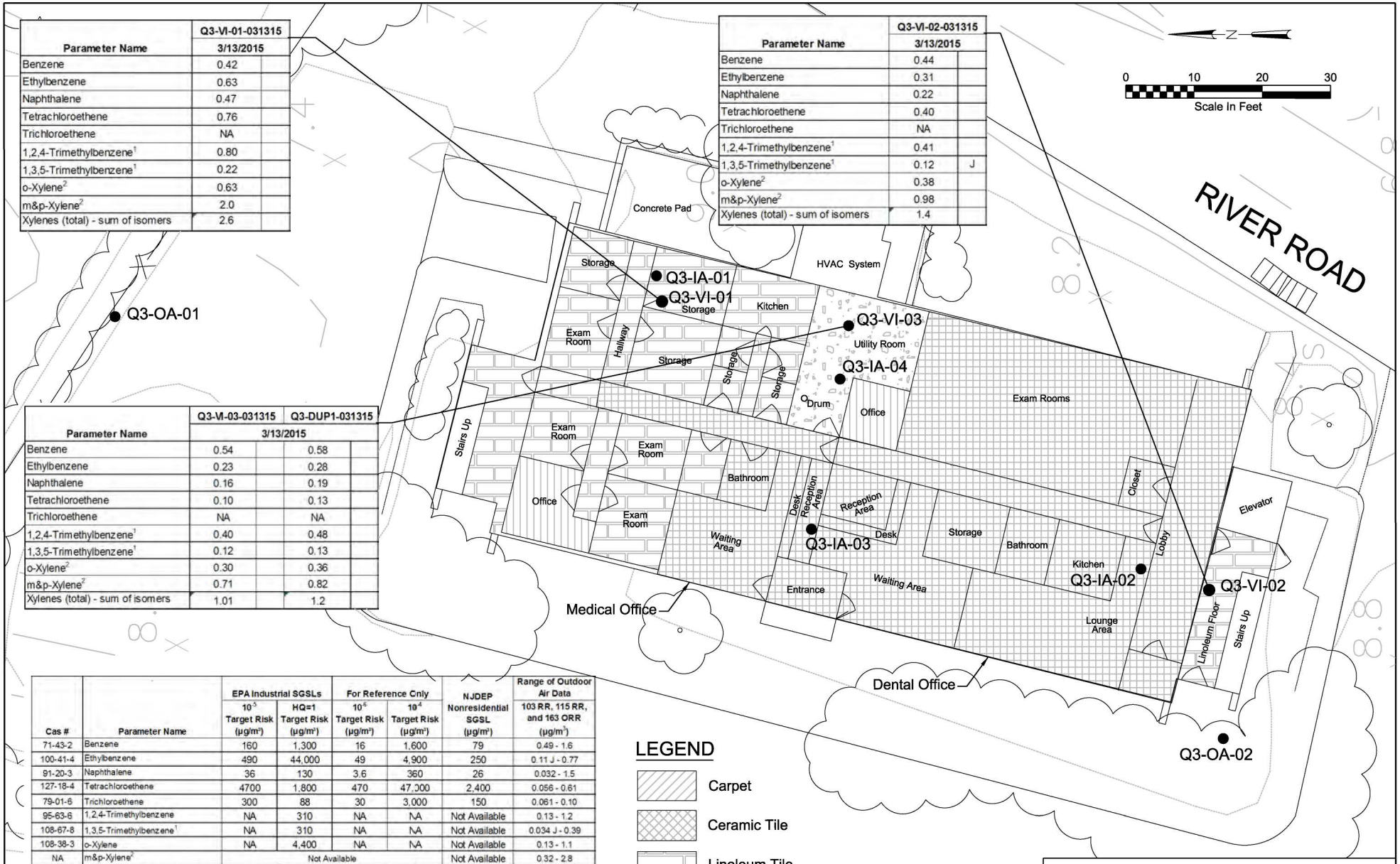
J = Data below calibration curve for that constituent, quantity estimated.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a]= The parent sample collected at this location in March 2015 was not analyzed because the canister leaked during shipment.



LEGEND

- Carpet
- Ceramic Tile
- Linoleum Tile
- Bare Concrete

NOTES

Sample locations are approximate.

Medical office room locations are close to scale.
Dental office room locations are approximate.

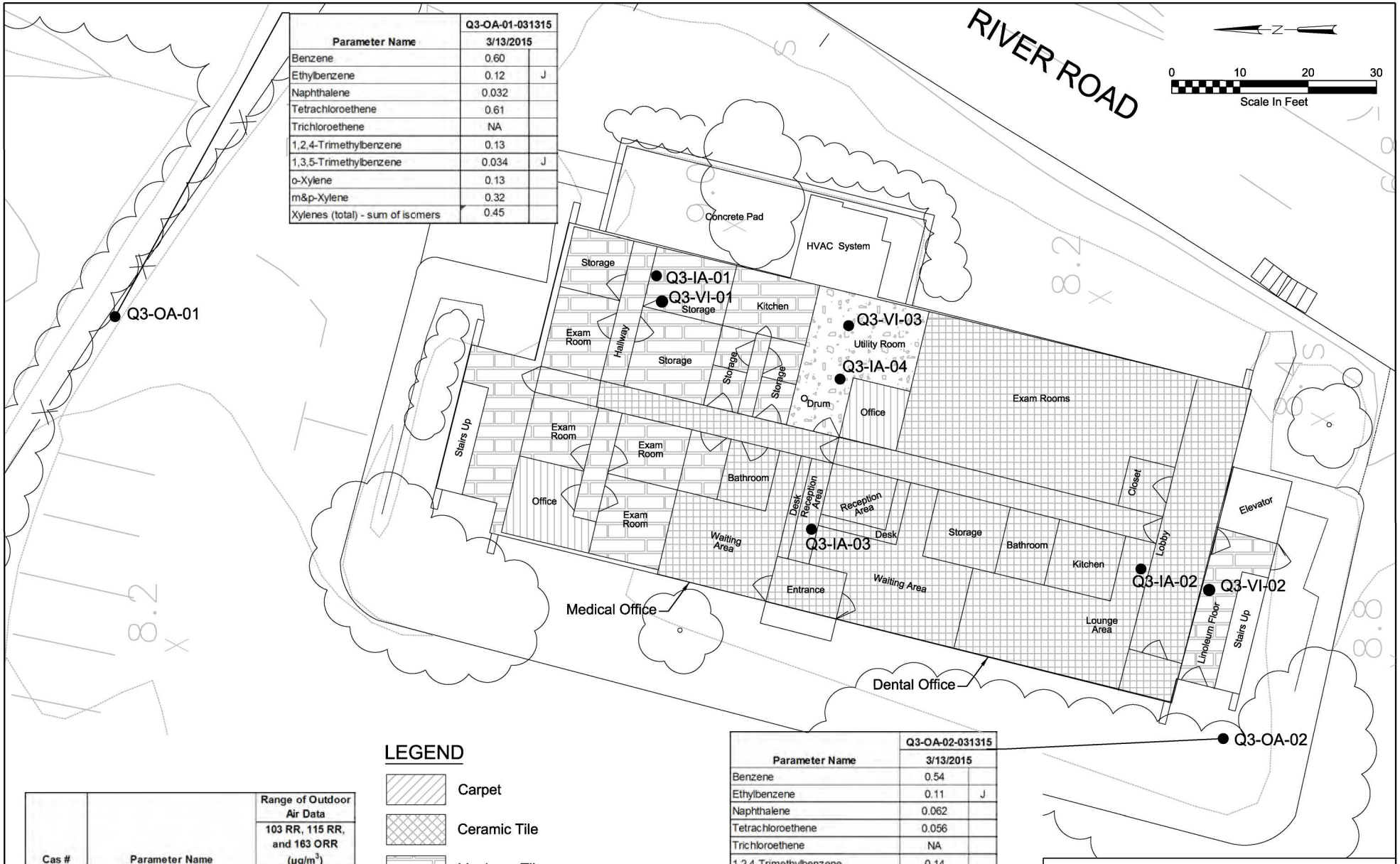
ch2m

103 River Road Building
Vapor Intrusion Monitoring Event
Subslab Air Sample Locations

Quanta Resources Site
103 Old River Road Building
Edgewater, New Jersey

July 2015 | Figure 10

PHL | NDM | HONEYWELL INT_VAPOR INTRUSION | DELIVERABLES | 103_RR_Subslab.dgn



Parameter Name	Q3-OA-01-031315 3/13/2015	
Benzene	0.60	
Ethylbenzene	0.12	J
Naphthalene	0.032	
Tetrachloroethene	0.61	
Trichloroethene	NA	
1,2,4-Trimethylbenzene	0.13	
1,3,5-Trimethylbenzene	0.034	J
o-Xylene	0.13	
m&p-Xylene	0.32	
Xylenes (total) - sum of iscmers	0.45	

Parameter Name	Q3-OA-02-031315 3/13/2015	
Benzene	0.54	
Ethylbenzene	0.11	J
Naphthalene	0.062	
Tetrachloroethene	0.056	
Trichloroethene	NA	
1,2,4-Trimethylbenzene	0.14	
1,3,5-Trimethylbenzene	0.041	J
o-Xylene	0.14	
m&p-Xylene	0.35	
Xylenes (total) - sum of isomers	0.49	

Cas #	Parameter Name	Range of Outdoor Air Data 103 RR, 115 RR, and 163 ORR ($\mu g/m^3$)
71-43-2	Benzene	0.49 - 1.6
100-41-4	Ethylbenzene	0.11 J - 0.77
91-20-3	Naphthalene	0.032 - 1.5
127-18-4	Tetrachloroethene	0.056 - 0.61
79-01-6	Trichloroethene	0.061 - 0.10
95-63-6	1,2,4-Trimethylbenzene	0.13 - 1.2
108-67-8	1,3,5-Trimethylbenzene[1]	0.034 J - 0.39
108-38-3	o-Xylene	0.13 - 1.1
NA	m&p-Xylene[2]	0.32 - 2.8
1330-20-7	Xylenes (total) - sum of isomers	0.45 - 3.9

LEGEND

- Carpet
- Ceramic Tile
- Linoleum Tile
- Bare Concrete

NOTES

Sample locations are approximate.

Medical office room locations are close to scale.
Dental office room locations are approximate.

ch2m

103 River Road Building
Vapor Intrusion Monitoring Event
Outdoor Air Sample Locations

Quanta Resources Site
103 Old River Road Building
Edgewater, New Jersey

July 2015 | Figure 11

PHL | NDM | HONEYWELL INT_VAPOR INTRUSION | DELIVERABLES | 103_RR_Outdoor_Air.dgn

Attachment B
Deviations and Sampling Logs

ATTACHMENT B

Deviations in Sampling Procedures

The following deviations to the proposed sampling plan occurred due to site conditions during the sampling event. Additional details are provided in the sampling logs included in this attachment.

115 River Road

The samples were not all collected concurrently due to access issues in the Buildings. The indoor air samples at Buildings 9, 10, and 11 were collected along with an outdoor air sample December 17-18. The indoor air samples at Buildings 2, 4-6, 7, and 8, the four crawlspace samples, and the remaining outdoor air samples were collected December 18-19. The indoor and crawlspace air samples at Building 3 were collected December 19-20. Sampling date and time information is provided in the logs in **Attachment B**. This deviation will not affect the results or conclusions of the monitoring event because each "building" (e.g., 9, 11) at 115 River Road are separated by dividing walls like a strip mall.

Two of the indoor air sample canisters, Q1-IA-13 in Building 3 and Q1-IA-36 in Building 7, did not maintain the final pressure when they reached the lab due to a leaking valves. A new canister was deployed for re-sampling March 26–17, 2015 at Q1-IA-12. There was a duplicate sample collected at Q1-IA-36 so this was used as the sample at this location and another duplicate sample was collected at a different location, Q1-IA-24 in the Building 7/8 basement May 19–20, 2015.

Some of the canisters were received by the laboratory with positive final pressures; however the canister valves were not leaking so the samples were analyzed. There was an observable trend between the final field and lab measured canister pressures such that the lab measured final canister pressures were approximately 1 to 2" Hg higher which is likely due to temperature and elevation differences between the field and the lab. The sample data from these canisters is considered valid because the laboratory confirmed the canister valves were not leaking.

One of the indoor air sample canisters, Q1-IA-41 in Building 9, was collected on March 11, 2015 and the final pressure was low so the sample was recollected March 11–12, 2015.

One of the indoor air sample canisters, Q1-IA-03 in Building 10, was collected on March 11, 2015 and the final pressure was low so the sample was recollected March 11–12, 2015. However, the second sample had a final pressure of 0 "Hg so the original sample was submitted for analysis.

163 Old River Road

None.

103 River Road

Some of the canisters were received by the laboratory with positive final pressures; however the canister valves were not leaking so the samples were analyzed. There was an observable trend between the final field and lab measured canister pressures such that the lab measured final canister pressures were approximately 1 to 2 "Hg higher which is likely due to temperature and elevation differences between the field and the lab. The sample data from these canisters is considered valid because the laboratory confirmed the canister valves were not leaking.

TABLE 1A

Sample Locations - Winter 2014/2015 Vapor Intrusion Monitoring Event

103 River Road Building

Quanta Site, Edgewater, New Jersey

Indoor Air Sample Locations

Location ID	Sample Location Description
Q3-IA-01	Medical office storage room
Q3-IA-02	Dentist office hallway by exit door
Q3-IA-03	Medical office reception area
Q3-IA-04	Medical office utility room

Subslab Sample Locations

Location ID	Sample Location Description
Q3-VI-01	Medical office storage room
Q3-VI-02	South stairwell
Q3-VI-03	Medical office utility room

Outdoor Air Sample Locations

Location ID	Sample Location Description
Q3-OA-01	North side of 103 River Road building
Q3-OA-02	Southwest corner of the 103 RR Building

TABLE 1B
Indoor and Outdoor Air Sampling Log - March 2015
103 River Road Building
Quanta Site, Edgewater, New Jersey

Field ID	Location Description	Canister ID	Pressure Gauge ID	Flow Controller ID	Flow Controller Rate	Sample Start Date	Sample Start Time	Initial Canister Pressure ("Hg)		20-hr Check Time	20-hr Check Pressure - Analoge Gaug ("Hg)	Sample End Date	Sample End Time	Final Pressure ("Hg)		Final Lab Pressure ("Hg)
								Analog Gauge	Digital Gauge					Analog Gauge	Digital Gauge	Digital Gauge
Q3-IA-01-031315	Medical Office Storage Room	AC01896	AVG03437	FCA00847	24 hr	03/12/15	14:18	-30	-30.51	10:43	-1.5	03/13/15	10:43	-1.5	-0.39	1.55
Q3-IA-02-031315	Dentist Office Hallway	AC02053	AVG03905	FCA00967			14:32	-30	-30.50	10:38	0		10:38	0	-0.36	1.22
Q3-IA-03-031315	Medical Office Reception Area	AC01995	AVG04236	FCA00887			14:30	-30	-30.51	10:42	-4.5		12:54	-2.5	-3.12	-1.20
Q3-IA-04-031315	Medical Office Utility Room	AC01649	AVG04157	FCA00160			14:24	-30	-30.53	10:41	-6.5		12:47	-4	-5.01	-3.01
Q3-OA-01-031315	North of 103 River Road Building on Fence	AS00845	AVG03665	FCA00866			14:43	-30	-30.49	10:35	-6		12:58	-3.5	-2.19	0.10
Q3-OA-02-031315	Southwest corner of the 103 RR Building	AC01460	AVG04167	FCA00610			14:53	-28	-30.47	10:45	0		10:45	0	-0.90	3.24

Notes:
ID = identification
"Hg = inches of mercury
hr = hour

TABLE 1C
Subslab Soil Gas Sampling Log - March 2015
103 River Road Building
Quanta Site, Edgewater, New Jersey

Field ID	Location Description	Purge and Sample Start Date	Purge Start Time	Purge Rate (mL/min)	Purge End Time	Water Dam Leak Check[1] (pass/fail)	Total VOCs in Purge Gas (ppm)	GEM 2000 Landfill Gas Meter from Purged Gas (%v)			Canister ID	Pressure Gauge ID	Flow Controller ID	Flow Controller Rate	Sample Start Time	Initial Canister Pressure ("Hg)		20-hr Check Time	20-hr Check Pressure - Analog Gauge ("Hg)	Sample End Date	Sample End Time	Final Pressure ("Hg)		Final Lab Pressure ("Hg)
								Oxygen	Carbon Dioxide	Methane						Analog Gauge	Digital Gauge					Analog Gauge	Digital Gauge	Digital Gauge
Q3-VI-01-031315	Medical Office Storage Room	03/12/15	14:05	200	14:10	Pass	1.3	21.2	0.1	0	AS00548	AVG03411	FCA00818	24 hr	14:17	-30	-30.51	10:44	-1.5	03/13/15	10:44	-1.5	-1.88	0.22
Q3-VI-02-031315	South Stairwell		14:39	200	14:44	Pass	1.4	21.4	0.2	0	AC01139	AVG08418	FCA00711		14:51	-30	-30.45	10:45	-8.5		13:29	-5	-2.51	-0.29
Q3-VI-03-031315	Medical Office Utility Room		13:35	200	13:40	Pass	1.8	21.5	0.2	0	AS00804	AVG03839	FCA00667		13:45	-30	-30.50	10:40	-4		12:29	-2	-0.22	2.04
Q3-DUP1-031315											AS00443	AVG03874	FCA00964			-30	-30.52		-5			-4	-2.96	0.90

Notes:
ID = identification
mL/min = milliliters per minute
%v = percent by volume
"Hg = inches of mercury
hr = hour
[1] = the subslab soil gas probes are Cox Colvin brand Vapor Pins and are leak tested in accordance with the Cox Colvin water dam leak test method

TABLE 1A

Sample Locations - Winter 2014/2015 Vapor Intrusion Monitoring Event

115 River Road Building

Quanta Site, Edgewater, New Jersey

Indoor Air Sample Locations

Location ID	Bldg #	Floor	Sample Location Description
Q1-IA-32	2	1st	Center of main open space on table
Q1-IA-13	3	2nd	Suite 321 - open workspace on south side near center of Bldg 3
Q1-IA-35	4	1st	Conference room on side table (center of Building 4)
Q1-IA-28	6	1st	Storage room on north side near former stairway
Q1-IA-36	7	1st	Suite 701 - east side of main room next to fighting ring
Q1-IA-37	7/8	1st	West side of main room next to men's restroom
Q1-IA-21	7/8	Basement	Hallway near Bldg 7/8 Sump 2
Q1-IA-23	7/8	Basement	Far east room - middle of room near the floor drain
Q1-IA-24	7/8	Basement	Far west room - next to elevator shaft
Q1-IA-25	7/8	Basement	West side, main room near Bldg 7/8 Sump 1
Q1-IA-42	8	2nd	Suite 824 - corner of inner office near elevator
Q1-IA-43	8	3rd	Suite 830 - entrance area near elevator
Q1-IA-40	9	1st	Suite 901 - west side utility room
Q1-IA-41	9	1st	Suite 901 - east side storage room
Q1-IA-22	10	Basement	Main room - center of room
Q1-IA-03	10	Basement	Northeastern most storage room with sump
Q1-IA-44	10	1st	Suite 1001 - center of main room
Q1-IA-45	10	1st	Suite 1003 - center of reception area
Q1-IA-39	11	1st	West side of main room

Crawl Space Air Sample Locations

Location ID	Bldg #	Floor	Sample Location Description
Q1-CS-01	6	Crawl Space	Northwest side
Q1-CS-04	4	Crawl Space	South side
Q1-CS-05	3	Crawl Space	Hole in lobby tile floor, center of Bldg 3
Q1-CS-07	2	Crawl Space	South side

Outdoor Air Sample Locations

Location ID	Bldg #	Floor	Sample Location Description
Q1-OA-03	10	Fence	115 River Road south parking lot chained to fence
Q1-OA-06	1	Fence	North side of 115 River Road near Hudson River at Quanta site Fence
Q1-OA-09	1	Fence	South of 115 RR Bldg next to Hudson River
Q1-OA-10	12	Fence	Northwest corner of Building 12 at Quanta Site fence

TABLE 1B

Indoor, Crawl Space and Outdoor Air Sampling Log - March and May 2015

115 River Road Building

Quanta Site, Edgewater, New Jersey

Field ID	Bldg #	Floor	Location Description	Canister ID	Pressure Gauge ID	Flow Controller ID	Flow Controller Rate	Sample Start Date	Sample Start Time	Initial Canister Pressure ("Hg)		20-hr Check Time	20-hr Check Pressure - Analog Gauge ("Hg)	Sample End Date	Sample End Time	Final Field Pressure ("Hg)		Final Lab Pressure ("Hg)
										Analog Gauge	Digital Gauge					Analog Gauge	Digital Gauge	Digital Gauge
Q1-IA-32-031215	2	1st	Center of main open space on table	AS00243	AVG04356	FCA00492	24 Hour	3/11/2015	17:16	-29	-30.28	15:19	-3.5	3/12/2015	15:19	-3.5	-4.85	-3.05
Q1-IA-13-031215[1]	3	2nd	Suite 321 - open workspace on south side near center of Bldg 3	AC01638	AVG04328	FCA00178	24 Hour	3/11/2015	17:05	-29	-30.05	15:58	0	3/12/2015	15:58	0	-1.33	0.39
Q1-IA-13-032615				AS00237	AVG03537	FCA00716	24 Hour	3/26/2015	14:05	-30	-29.55	10:35	-6	3/27/2015	10:35	-6	-6.73	-5.23
Q1-IA-35-031215	4	1st	Conference room on table (west side of Building 4)	AS00657	AVG04027	FCA00854	24 Hour	3/11/2015	17:18	-30	-30.20	15:23	-5	3/12/2015	16:09	-4	-4.03	-2.69
Q1-IA-28-032015	6	1st	Storage room on north side near former stairway	AC01252	AVG04365	FCA00404	24 Hour	3/19/2015	11:25	-30	-30.57	8:50	-2	3/20/2015	8:50	-2	-8.60	-6.47
Q1-IA-36-032015[1]	7	1st	Suite 701 - east side of main room next to fighting ring	AS00460	AVG04162	FCA00674	24 Hour	3/19/2015	10:50	-30	-30.54	8:40	-2	3/20/2015	8:40	-2	-2.50	0.51
Q1-DUP1-032015				AC02028	AVG03373	FCA00891				-30	-30.66		-3			-3	-3.55	-0.69
Q1-IA-37-032015	7	1st	West side of main room next to men's restroom	AC00244	AVG03982	FCA00651	24 Hour	3/19/2015	11:15	-30	-30.28	8:37	0	3/20/2015	8:37	0	-0.83	1.71
Q1-IA-21-052015	7/8	Basement	Hallway near Bldg 7/8 Sump 2	AS00600	AVG04354	FCA00486	24 Hour	5/19/2015	13:25	-30	-29.78	10:52	-7.5	5/20/2015	13:35	-5	-4.37	-3.34
Q1-DUP2-052015				AS00877	AVG03963	FCA00375				-30	-29.81		-7			-5	-4.65	-3.64
Q1-IA-23-052015	7/8	Basement	Far east room - middle of room near the floor drain	AC01362	AVG03923	FCA00497	24 Hour	5/19/2015	13:22	-30	-29.78	10:51	-9	5/20/2015	13:23	-5.5	-4.04	-3.14
Q1-IA-24-052015	7/8	Basement	Far west room - next to elevator shaft	AS00754	AVG04174	FCA00700	24 Hour	5/19/2015	13:27	-30	-29.80	10:54	-17	5/20/2015	14:00	-15	-14.90	-13.99
Q1-DUP4-052015				AC00765	AVG04103	FCA00589				-30	-29.70		-7			-5	-3.63	-2.75
Q1-IA-25-052015	7/8	Basement	West side, main room near Bldg 7/8 Sump 1	AC01777	AVG04364	FCA00834	24 Hour	5/19/2015	13:28	-30	-29.73	10:53	-5.5	5/20/2015	12:05	-4	-4.11	-2.97
Q1-IA-42-031115	8	2nd	Suite 824 - corner of inner office near elevator	AC01881	AVG04339	FCA00843	24 Hour	3/10/2015	14:06	-30	-30.14	13:32	-8	3/11/2015	15:13	-7	-8.10	-6.70
Q1-IA-43-031115	8	3rd	Suite 830 - entrance area near elevator	AC01036	AVG03884	FCA00706	24 Hour	3/10/2015	14:08	-30	-30.38	11:18	-6.5	3/11/2015	15:11	-4	-2.90	-1.85
Q1-IA-40-031115	9	1st	Suite 901 - west side utility room	AC00714	AVG04329	FCA00495	24 Hour	3/10/2015	13:56	-30	-30.30	11:23	-8	3/11/2015	15:54	-4	-4.97	-3.69
Q1-IA-41-[1]	9	1st	Suite 901 - east side storage room	AC01606	AVG04364	FCA00401	24 Hour	3/10/2015	13:58	-30	-30.27	11:19	0	Canister measured with digital gauge at -0.16 "Hg, decided to redeploy				
Q1-IA-41-031215				AC01804	AVG04333	FCA00730	24 Hour	3/11/2015	13:42	-30	-30.42	10:00	-4	3/12/2015	10:00	-4	-5.25	-3.12
Q1-IA-22-031115	10	Basement	Main room - center of room	AC00870	AVG04363	FCA00694	24 Hour	3/10/2015	15:55	-29.5	-30.21	11:29	-2.5	3/11/2015	11:29	-2.5	-3.70	-1.51

TABLE 1B

Indoor, Crawl Space and Outdoor Air Sampling Log - March and May 2015

115 River Road Building

Quanta Site, Edgewater, New Jersey

Field ID	Bldg #	Floor	Location Description	Canister ID	Pressure Gauge ID	Flow Controller ID	Flow Controller Rate	Sample Start Date	Sample Start Time	Initial Canister Pressure ("Hg)		20-hr Check Time	20-hr Check Pressure - Analog Gauge ("Hg)	Sample End Date	Sample End Time	Final Field Pressure ("Hg)		Final Lab Pressure ("Hg)
										Analog Gauge	Digital Gauge					Analog Gauge	Digital Gauge	Digital Gauge
Q1-IA-03-031015[2]	10	Basement	Northeastern most storage room with sump	AS00851	AVG04366	FCA00963	24 Hour	3/10/2015	15:53	-29	-30.20	11:30	0	3/11/2015	11:30	0.0	-0.23	2.38
Q1-IA-03-[1]				AS00859	AVG04350	FCA00722	24 Hour	3/11/2015	13:23	-29	-30.69	9:57	0	Canister measured with digital gauge at 0 "Hg, will use previous sample				
Q1-IA-44-031115	10	1st	Suite 1001 - center of main room	AC02036	AVG04161	FCA00482	24 Hour	3/10/2015	15:38	-30	-30.27	11:40	-1	3/11/2015	11:40	-1	-1.16	0.43
Q1-IA-45-031115	10	1st	Suite 1003 - center of reception area	AC02046	AVG3698	FCA00266	24 Hour	3/10/2015	15:50	-30	-30.35	11:39	-4	3/11/2015	11:39	-4	-2.93	-1.83
Q1-IA-39-031115	11	1st	West side of main room	AS00703	AVG04357	FCA00428	24 Hour	3/10/2015	17:02	-29.5	-30.32	11:56	-3	3/11/2015	11:56	-3	-4.25	-2.65
Q1-CS-01-052015	6	Crawl Space	Bldg 6 NW side	AS00826	AVG03494	FCA00669	24 Hour	5/19/2015	13:21	-30	-29.81	10:50	-6	5/20/2015	12:45	-4	-4.54	-3.58
Q1-DUP3-052015				AS00091	AVG04360	FCA00484				-30	-29.62		-6			-4	-2.60	-1.61
Q1-CS-04-031215	4	Crawl Space	Bldg 4 N side	AC01840	AVG03037	FCA00079	24 Hour	3/11/2015	16:53	-29.5	-30.19	15:15	0	3/12/2015	15:15	0	-1.26	0.73
Q1-CS-05-031215	3	Crawl Space	Bldg 3 SW side	AS00388	AVG04354	FCS00262	24 Hour	3/11/2015	17:11	-30	-30.17	15:56	-3	3/12/2015	15:56	-3	-4.23	-1.89
Q1-CS-07-031215	2	Crawl Space	Bldg 2 S side	AC00726	AVG04358	FCA00911	24 Hour	3/11/2015	16:36	-28	-30.18	15:13	0	3/12/2015	15:13	0	-1.19	1.02
Q1-OA-03-031115	NA	Fence	115 RR bldg south parking lot	AS00858	AVG04359	FCA00034	24 Hour	3/10/2015	16:40	-30	-30.35	12:03	-0.5	3/11/2015	12:03	-0.5	-1.47	0.41
Q1-OA-06-032015	NA	Fence	North side of 115 River Road near Hudson River at Quanta site fence	AS00400	AVG03981	FCA00057	24 Hour	3/19/2015	10:12	-30	-30.31	7:20	-5	3/20/2015	8:00	-4	-4.58	-1.51
Q1-OA-09-031215	NA	Fence	South of 115 RR Bldg next to river	AS00823	AVG04367	FCA00635	24 Hour	3/11/2015	16:29	-28.5	-30.17	15:12	-3	3/12/2015	15:12	-3	-4.50	-2.28
Q1-OA-10-032015	NA	Fence	NW corner of Bldg 12	AC01127	AVG03365	FCA00880	24 Hour	3/19/2015	10:30	-30	-30.36	8:35	-8	3/20/2015	12:10	-5	-4.65	-1.77
Q1-OA-10-052015				AS00764	AVG03517	FCA00763		5/19/2015	13:29	-28	-29.81	10:55	-4.5	5/20/2015	12:20	-3	-4.20	-2.85

Notes:

ID = identification

"Hg = inches of mercury

hr = hour

[1] = sample not analyzed

[2] = The sample was held by the lab and the sample was recollected due to the low final pressure; however the second canister failed so this original sample was analyzed.

TABLE 1A

Sample Locations - Winter 2014/2015 Vapor Intrusion Monitoring Event

163 Old River Road Building

Quanta Site, Edgewater, New Jersey

Indoor Air Sample Locations

Location ID	Sample Location Description
Q2-IA-01	Kitchen - counter top
Q2-IA-02	1st floor dining room - on table near wall
Q2-IA-03	2nd floor dining room - on table in SW room

Subslab Sample Locations

Location ID	Sample Location Description
Q2-VI-01	Storage room next to stairs
Q2-VI-02	Kitchen - north side next to water service closet

Outdoor Air Sample Locations

Location ID	Sample Location Description
Q2-OA-01	South side of 163 Old River Road building - chained to fence
Q2-OA-02	Northwest of parking lot - chained to fence

TABLE 1B
Indoor and Outdoor Air Sampling Log - March 2015
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

Field ID	Location Description	Canister ID	Pressure Gauge ID	Flow Controller ID	Flow Controller Rate	Sample Start Date	Sample Start Time	Initial Canister Pressure ("Hg)		20-hr Check Time	20-hr Check Pressure - Analoge Gauge ("Hg)	Sample End Date	Sample End Time	Final Pressure ("Hg)		Final Lab Pressure ("Hg)
								Analoge Gauge	Digital Gauge					Analoge Gauge	Digital Gauge	Digital Gauge
Q2-IA-01-031015	Kitchen - counter top	AC01758	AVG04196	FCA00585	24 hr	03/09/15	13:37	-28	-30.35	9:32	-10	03/10/15	14:24	-5	-5.35	-3.64
Q2-IA-02-031015	1st floor dinning room - on table near wall	AS00601	AVG04135	FCA00799			13:43	-30	-30.35	9:27	-12		15:05	-6	-5.24	-3.60
Q2-IA-03-031015	2nd floor dinnig room - on partition in center of room	AS00535	AVG04191	FCA00966			13:41	-27	-30.32	9:28	-7.5		15:04	-2	-4.48	-2.87
Q2-DUP1-031015		AC01322	AVG03563	FCA00353				-23	-30.29		-13.5			-9	-10.99	-8.94
Q2-OA-01-031015	South of bldg chained to fence	AS00737	AVG03846	FCA00957			13:47	-30	-30.32	9:35	-6.5		12:47	-4	-3.12	-1.53
Q2-OA-02-031015	Northwest of parking lot chained to fence	AC01280	AVG03714	PCA00801			13:48	-30	-30.34	9:34	-4		10:44	-3	-3.38	-0.79

Notes:
ID = identification
"Hg = inches of mercury
hr = hour

TABLE 1C
Subslab Soil Gas Sampling Log - March 2015
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

Field ID	Location Description	Purge and Sample Start Date	Purge Start Time	Purge Rate (mL/min)	Purge End Time	Water Dam Leak Check[1] (pass/fail)	Total VOCs in Purge Gas (ppm)	GEM 2000 Landfill Gas Meter from Purged Gas (%v)			Canister ID	Pressure Gauge ID	Flow Controller ID	Flow Controller Rate	Sample Start Time	Initial Canister Pressure ("Hg)		20-hr Check Time	20-hr Check Pressure - Analog Gauge ("Hg)	Sample End Date	Sample End Time	Final Pressure ("Hg)		Final Lab Pressure ("Hg)
								Oxygen	Carbon Dioxide	Methane						Analog Gauge	Digital Gauge					Analog Gauge	Digital Gauge	Digital Gauge
Q2-VI-01-031015	Storage room next to stairs	03/09/15	13:25	200	13:30	Pass	2.6	21.1	0.1	0	SC01660	AVG03451	FCA00066	24 hr	13:39	-29.5	-30.34	9:33	-3	03/10/15	9:38	-3	-3.57	-1.36
Q2-VI-02-031015	Kitchen - north side next to water service closet		12:50	200	13:05	Pass	3.3	21.1	0.1	0	SSC00351	AVG03156	FCA00699		13:40	-30	-30.32	9:31	-12.5		15:03	-7	-5.38	-3.56

Notes:
ID = identification
mL/min = milliliters per minute
%v = percent by volume
"Hg = inches of mercury
hr = hour
[1] = the subslab soil gas probes are Cox Colvin brand Vapor Pins and are leak tested in accordance with the Cox Colvin water dam leak test method

Attachment C
Building Survey Forms

New Jersey Department of Environmental Protection

INDOOR AIR BUILDING SURVEY and SAMPLING FORM

Preparer's name: Jen Simms Date: 03/12/15

Preparer's affiliation: CH2M HILL Phone #: 610-246-0236

Site Name: Quanta Resources Superfund Site Case #: EPA # NJD000606442

Part I - Occupants

Building Address: Medical Arts Building 103 River Road Edgewater NJ

Building Block: 93 Lot: Medical office 201 845 4288 Dental office 201 840 0045

Property Contact: Danny Daibes (owner) / Renter / other:

Contact's Phone: home ( ) work (201) 840-0050 cell (201) 321-9968

# of Building occupants: Children under age 13 Children age 13-18 Adults

1st floor Medical office - 3 workers plus patients

Part II – Building Characteristics 1st floor Dental office - approximately 3-7 workers plus patients

Building type: residential / multi-family residential / office / strip mall / (commercial) / industrial

Describe building: 2 Story - 3 separate spaces Year constructed: early 1980s

Sensitive population: day care / nursing home / hospital / school / other (specify): Medical & dental offices

Number of floors below grade: 0 (full basement / crawl space / (slab on grade))

Number of floors at or above grade: 2

Depth of basement below grade surface: 0 ft. ~~Basement~~ footprint size: 5,000 ft²

~~Basement~~ floor construction: (concrete) / dirt / floating / stone / other (specify):

Foundation walls: poured concrete / (cinder blocks) / stone / other (specify)

Basement sump present? *Yes* / (*No*) Sump pump? *Yes* / *No* Water in sump? *Yes* / *No*

Type of heating system (circle all that apply):

hot air circulation	hot air radiation	wood	~~steam radiation~~
heat pump	hot water radiation	kerosene heater	(electric baseboard)
other (specify):			

Type of ventilation system (circle all that apply):

(central air conditioning)	mechanical fans	bathroom ventilation fans
individual air conditioning units	kitchen range hood fan	outside air intake
other (specify):		

Type of fuel utilized (circle all that apply):

(~~Natural gas~~) / (electric) / fuel oil / wood / coal / solar / kerosene

→ 2nd floor is Cardiologist office - no sampling there

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes / (No)*

Is there a whole house fan? *Yes / (No)*

Septic system? *Yes / Yes (but not used) / (No)*

Irrigation/private well? *Yes / Yes (but not used) / (No)*

Type of ground cover outside of building: (grass) / concrete / (asphalt) / other (specify) _____

Existing subsurface depressurization (radon) system in place? *Yes / No* *active / passive*

Sub-slab vapor/moisture barrier in place? *Yes / No* Maybe a moisture vapor barrier, not sure

Type of barrier: _____

Part III - Outside Contaminant Sources

NJDEP contaminated site (1000-ft. radius): Quanta Resources Superfund Site

Other stationary sources nearby (gas stations, emission stacks, etc.): Gas station ½ mile South, Hess facility 1 mile north

Heavy vehicular traffic nearby (or other mobile sources): River Road - 5 Lane busy road

→ Sewer pump station on property (strong odor in parking lot)

Part IV – Indoor Contaminant Sources Coffee roasting facility next door - burning smell

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment		
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents		
Oven cleaners		
Carpet / upholstery cleaners		
Other house cleaning products	bathrooms and breakrooms in both offices	No
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor polish		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners	bathrooms in both 1st floor offices	No
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New furniture / upholstery		
New carpeting / flooring		NA
Hobbies - glues, paints, etc.		

Part V – Miscellaneous Items

Smoking area outside of building

Do any occupants of the building smoke? *Yes* / (No) How often? _____

Last time someone smoked in the building? _____ hours / *days* *ago*

Does the building have an attached garage directly connected to living space? *Yes* / (No)

If so, is a car usually parked in the garage? *Yes* / *No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes* / *No*

Do the occupants of the building have their clothes dry cleaned? (Yes) / *No* Doctor wears dry cleaned suits

If yes, how often? weekly / monthly / 3-4 times a year

Do any of the occupants use solvents in work? *Yes* / (No)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? *Yes* / *No*

Have any pesticides/herbicides been applied around the building or in the yard? *Yes* / (No)

If so, when and which chemicals? _____

Has there ever been a fire in the building? *Yes* / (No) If yes, when? _____

Has painting or staining been done in the building in the last 6 months? *Yes* / (No)

If yes, when _____ and where? _____

Part VI – Sampling Information

Sample Technician: Jen Simms Phone number: (60) 246 - 0236

Company: CH2M HILL

Sample Source: (Indoor Air) (Sub-Slab) / Near Slab Soil Gas / Exterior Soil Gas

Were "Instructions for Occupants" followed? *Yes* / (No)

If not, describe modifications: _____

Sample locations (floor, room): See report tables

SAMPLING DATA

Sample #	Location	Analytical Method	Sample Volume	Sample Time	Sample Date	Sampler Type	Ambient Temp (°F)

-Drawing of Sample Location(s) in Building

Type of field instrument used (include summary of results): Purged subslab soil gas screened with PID and GEM2000. See tables in report

Part VII - Meteorological Conditions

Was there significant precipitation within 12 hours prior to (or during) the sampling event? *Yes / No*

Describe the general weather conditions: see report text

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

New Jersey Department of Environmental Protection

INDOOR AIR BUILDING SURVEY and SAMPLING FORM

Preparer's name: Jen Simms Date: 03/11/15

Preparer's affiliation: CH2M HILL Phone #: 610 246 0236

Site Name: Quanta Resources Superfund Site Case #: EPA# NJD000606492

Part I - Occupants

Building Address: 115 River Road, Edgewater, NJ - Bldg 2 Intake. 10

Building Block: 93 Lot: 3.03

Property Contact: Danny Daibes (Owner) / Renter / other: _____

Contact's Phone: home ( ) _____ work (201) 840 00 50 cell (201) 321 9968

# of Building occupants: Children under age 13 _____ Children age 13-18 _____ Adults _____

Part II – Building Characteristics

Building type: residential / multi-family residential / (office) / strip mall / commercial / industrial

Describe building: 2 story brick office bldg Year constructed: early 1900s

Sensitive population: day care / nursing home / hospital / school / other (specify): None

Number of floors below grade: _____ (full basement / (crawl space) / slab on grade)

Number of floors at or above grade: 2 - 2nd floor used for storage

Depth of basement below grade surface: 0 ft. ~~Basement~~ footprint size: ~2,000 ft²

Basement floor construction: concrete / dirt / floating / stone / (other) (specify): Foundation is wood beams on wood pilings.

Foundation walls: poured concrete / cinder blocks / stone / (other) (specify) Concrete floor on top of wood

Basement sump present? *Yes* / (*No*) Sump pump? *Yes* / *No* Water in sump? *Yes* / *No*

Type of heating system (circle all that apply): propane space heater sometimes used

hot air circulation	hot air radiation	wood	steam radiation
heat pump	hot water radiation	kerosene heater	electric baseboard

other (specify): hot water baseboards

Type of ventilation system (circle all that apply):

(central air conditioning)	mechanical fans	bathroom ventilation fans
individual air conditioning units	kitchen range hood fan	outside air intake

other (specify): _____

Type of fuel utilized (circle all that apply):

(Natural gas) / electric / fuel oil / wood / coal / solar / kerosene

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes* / (No)

Is there a whole house fan? *Yes* / (No)

Septic system? *Yes / Yes (but not used)* / (No)

Irrigation/private well? *Yes / Yes (but not used)* / (No)

Type of ground cover outside of building: (grass) / concrete / (asphalt) other (specify) _____
South North

Existing subsurface depressurization (radon) system in place? *Yes* / (No) *active / passive*

Sub-slab vapor/(moisture) barrier in place? (Yes) / *No*
Type of barrier: Sheet plastic

Part III - Outside Contaminant Sources

NJDEP contaminated site (1000-ft. radius): Quanta Resources Superfund Site

Other stationary sources nearby (gas stations, emission stacks, etc.): Gas station ½ mile south, Hess facility 1 mile North

Heavy vehicular traffic nearby (or other mobile sources): River Road (5-lane busy road)

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment		
Kerosene storage cans		
Paints / thinners / strippers	several cans of spray paint	No
Cleaning solvents		
Oven cleaners		
Carpet / upholstery cleaners		
Other house cleaning products		
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor polish		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners		
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New furniture / upholstery		
New carpeting / flooring		NA
Hobbies - glues, paints, etc.		

WD-40
Foam crack Sealant — both not removed

Part V – Miscellaneous Items Not inside the building

Do any occupants of the building smoke? *Yes / No* How often? _____

Last time someone smoked in the building? _____ hours / *days* *ago*

Does the building have an attached garage directly connected to living space? *Yes* / (No)

If so, is a car usually parked in the garage? *Yes / No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes / No*

Do the occupants of the building have their clothes dry cleaned? *Yes* / (No)

If yes, how often? weekly / monthly / 3-4 times a year

Do any of the occupants use solvents in work? *Yes* / (No)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? *Yes / No*

Have any pesticides/herbicides been applied around the building or in the yard? *Yes* / (No)

If so, when and which chemicals? _____

Has there ever been a fire in the building? *Yes / No* If yes, when? _____

Has painting or staining been done in the building in the last 6 months? *Yes* / (No)

If yes, when _____ and where? _____

Part VI – Sampling Information

Sample Technician: Jen Simms Phone number: (610) 246 - 0236

Company: CH2M HILL

Sample Source: (Indoor Air) / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas / (Crawl space air)

Were "Instructions for Occupants" followed? Yes / (No)

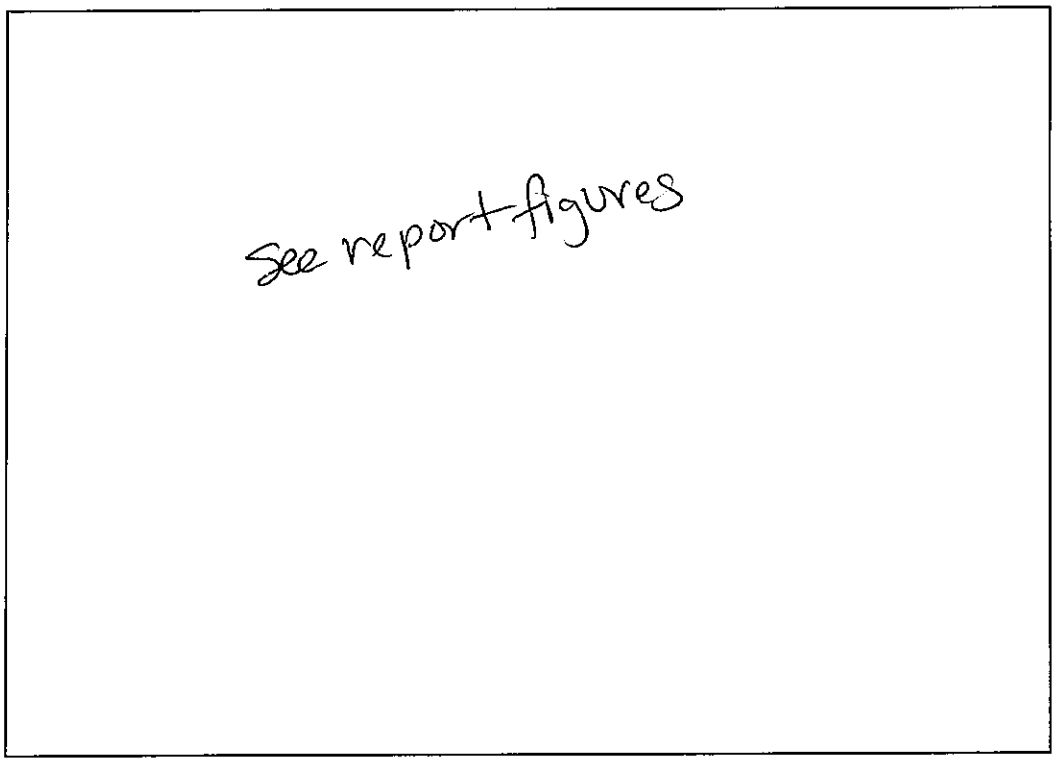
If not, describe modifications: _____

Sample locations (floor, room): See report tables

SAMPLING DATA

Sample #	Location	Analytical Method	Sample Volume	Sample Time	Sample Date	Sampler Type	Ambient Temp (°F)

-Drawing of Sample Location(s) in Building



Type of field instrument used (include summary of results): None

Part VII - Meteorological Conditions See report text

Was there significant precipitation within 12 hours prior to (or during) the sampling event? *Yes / No*

Describe the general weather conditions: _____

_____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

_____

_____

_____

New Jersey Department of Environmental Protection

INDOOR AIR BUILDING SURVEY and SAMPLING FORM

Preparer's name: Jen Simms Date: 03/11/15

Preparer's affiliation: CH2M HILL Phone #: 610 246 0236

Site Name: Quanta Resources Superfund Site Case #: EPA# NJD000606442

Part I - Occupants

Building Address: 115 River Road Edgewater NJ - Bldg 3 (2nd Floor)

Building Block: 93 Lot: 3.03

Property Contact: Danny Daibes (Owner) / Renter / other: _____

Contact's Phone: home ( ) _____ work (201) 840-0050 cell (201) 321-9968

# of Building occupants: Children under age 13 ____ Children age 13-18 ____ Adults ____

Part II – Building Characteristics Bldg 3 - 1st Floor is vacant, has been since Hurricain Sandy. 2nd Floor just recently became vaccant.

Building type: residential / multi-family residential / (office) / strip mall / commercial / industrial

Describe building: 2 story brick office building Year constructed: early 1900s

Sensitive population: day care / nursing home / hospital / school / other (specify): None

Number of floors below grade: ____ (full basement / (crawl space) / slab on grade)

Number of floors at or above grade: 2

Depth of basement below grade surface: 0 ft. ~~Basement~~ footprint size: 4,400 ft² Foundation is wood beams

Basement floor construction: concrete / dirt / floating / stone / (other) (specify): on wood pilings. Concrete

Foundation walls: poured concrete / cinder blocks / stone / (other) (specify) floor on top of wood

Basement sump present? *Yes* / (*No*) Sump pump? *Yes* / *No* Water in sump? *Yes* / *No*

Type of heating system (circle all that apply):

(hot air circulation)	hot air radiation	wood	steam radiation
heat pump	hot water radiation	kerosene heater	electric baseboard
other (specify): _____			

Type of ventilation system (circle all that apply):

(central air conditioning)	mechanical fans	bathroom ventilation fans
individual air conditioning units	kitchen range hood fan	outside air intake
other (specify): _____		

Type of fuel utilized (circle all that apply):

(Natural gas) / electric / fuel oil / wood / coal / solar / kerosene

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes* / (*No*)

Is there a whole house fan? *Yes* / (*No*)

Septic system? *Yes / Yes (but not used)* / (*No*)

Irrigation/private well? *Yes / Yes (but not used)* / (*No*)

Type of ground cover outside of building: (grass) / concrete / (asphalt) / other (specify) _____
South North

Existing subsurface depressurization (radon) system in place? *Yes* / (*No*) *active / passive*

Sub-slab vapor/(moisture) barrier in place? (*Yes*) / *No*

Type of barrier: Sheet plastic

Part III - Outside Contaminant Sources

NJDEP contaminated site (1000-ft. radius): Ringwood Resources Superfund Site

Other stationary sources nearby (gas stations, emission stacks, etc.): Gas Station ½ mile South, Hess facility 1 mile north

Heavy vehicular traffic nearby (or other mobile sources): River Road (5 lane busy road)

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment		
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents		
Oven cleaners		
Carpet / upholstery cleaners		
Other house cleaning products		
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor polish		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners		
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New furniture / upholstery		
New carpeting / flooring		NA
Hobbies - glues, paints, etc.		

First floor is all vacant tenant spaces.
Second floor was recently vacated but everything was left in place. It was an agency that made models of products so there are craft products like paint, glue, etc in the main room. There are also typical household cleaning products in the space.

Part V – Miscellaneous Items

There was no smoking in the building when it was in use.

Do any occupants of the building smoke? *Yes / No* How often? _____

Last time someone smoked in the building? _____ hours / *days* *ago*

Does the building have an attached garage directly connected to living space? *Yes* / (No)

If so, is a car usually parked in the garage? *Yes / No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes / No*

Do the occupants of the building have their clothes dry cleaned? *Yes / No* Vacant bldg

If yes, how often? weekly / monthly / 3-4 times a year

Do any of the occupants use solvents in work? *Yes* / (No)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? *Yes / No*

Have any pesticides/herbicides been applied around the building or in the yard? *Yes* / No

If so, when and which chemicals? the previous tenant had pest control for Mice

Has there ever been a fire in the building? *Yes / No* If yes, when? _____

Has painting or staining been done in the building in the last 6 months? (Yes) / *No*

If yes, when past tenant painted models and where? _____

Part VI – Sampling Information

Sample Technician: Jen Simms Phone number: (610) 246 - 0236

Company: CH2M HILL

Sample Source: (Indoor Air) / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas / (crawl space air)

Were "Instructions for Occupants" followed? Yes / (No) Vacant

If not, describe modifications: _____

Sample locations (floor, room): see report tables

SAMPLING DATA

Sample #	Location	Analytical Method	Sample Volume	Sample Time	Sample Date	Sampler Type	Ambient Temp (°F)

-Drawing of Sample Location(s) in Building

see report figures

Type of field instrument used (include summary of results): none

Part VII - Meteorological Conditions see report text

Was there significant precipitation within 12 hours prior to (or during) the sampling event? *Yes / No*

Describe the general weather conditions: _____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

New Jersey Department of Environmental Protection

INDOOR AIR BUILDING SURVEY and SAMPLING FORM

Preparer's name: Jen Simms Date: 03/11/15

Preparer's affiliation: CH2M HILL Phone #: 610 246-0236

Site Name: Quanta Resources Superfund Site Case #: EPA# NJ0006064 42

Part I - Occupants

Building Address: 115 River Road, Edgwater NJ - Buildings 4-6 (1st & 2nd floors)

Building Block: 93 Lot: 3.03

Property Contact: Danny Daibes (Owner) Renter / other: _____

Contact's Phone: home ( ) _____ work (201) 840-0050 cell (201) 321-9968

# of Building occupants: Children under age 13 _____ Children age 13-18 _____ Adults approximately 20 workers

Part II – Building Characteristics

Building type: residential / multi-family residential / (office) / strip mall / commercial / industrial

Describe building: Brick & corrugated metal Year constructed: early 1900s

Sensitive population: day care / nursing home / hospital / school / other (specify): none

Number of floors below grade: _____ (full basement (crawl space) slab on grade)

Number of floors at or above grade: 3

Depth of basement below grade surface: _____ ft. ~~Basement~~ Footprint size: 4,200 ft² Bldg 4 - 2,000 ft² Bldg 5 - 800 ft² Bldg 6 - 1,400 ft²

Basement floor construction: concrete / dirt / floating / stone (other) (specify): Foundation is wood beams on wood pilings. Concrete

Foundation walls: poured concrete / cinder blocks / stone / (other) (specify) floor on top of wood.

Basement sump present? *Yes* / (No) Sump pump? *Yes* / *No* Water in sump? *Yes* / *No*

Type of heating system (circle all that apply):

(hot air circulation) hot air radiation wood steam radiation
heat pump hot water radiation kerosene heater electric baseboard
other (specify): _____

Type of ventilation system (circle all that apply):

(central air conditioning) mechanical fans bathroom ventilation fans
individual air conditioning units kitchen range hood fan outside air intake
other (specify): _____

Type of fuel utilized (circle all that apply):

(Natural gas) / electric / fuel oil / wood / coal / solar / kerosene

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes* / (*No*)

Is there a whole house fan? *Yes* / (*No*)

Septic system? *Yes / Yes (but not used)* / (*No*)

Irrigation/private well? *Yes / Yes (but not used)* / (*No*)

Type of ground cover outside of building: (grass) concrete / (asphalt) / other (specify) _____
South North

Existing subsurface depressurization (radon) system in place? *Yes* / (*No*) *active / passive*

Sub-slab vapor/(moisture barrier) in place? (*Yes*) / *No*
Type of barrier: sheet plastic

Part III - Outside Contaminant Sources

NJDEP contaminated site (1000-ft. radius): Quanta Resources Superfund Site

Other stationary sources nearby (gas stations, emission stacks, etc.): Gas Station ½ mile south, Hess facility 1 mile north

Heavy vehicular traffic nearby (or other mobile sources): River Road (5 lane busy road)

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment		
Kerosene storage cans		
Paints / thinners / strippers	spray paint	No
Cleaning solvents		
Oven cleaners		
Carpet / upholstery cleaners		
Other house cleaning products		
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor polish		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners		
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New furniture / upholstery		
New carpeting / flooring		NA
Hobbies - glues, paints, etc.		

Part V – Miscellaneous Items

Do any occupants of the building smoke? *Yes* / (No) How often? _____

Last time someone smoked in the building? _____ hours / *days* *ago*

Does the building have an attached garage directly connected to living space? *Yes* / (No)

If so, is a car usually parked in the garage? *Yes* / *No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes* / *No*

Do the occupants of the building have their clothes dry cleaned? (Yes) / *No*

If yes, how often? (weekly) / monthly / 3-4 times a year

Do any of the occupants use solvents in work? *Yes* / (No)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? *Yes* / *No*

Have any pesticides/herbicides been applied around the building or in the yard? *Yes* / (No)

If so, when and which chemicals? _____

Has there ever been a fire in the building? *Yes* / (No) If yes, when? _____

Has painting or staining been done in the building in the last 6 months? *Yes* / (No)

If yes, when _____ and where? _____

Part VI – Sampling Information

Sample Technician: Jen Simms Phone number: (610) 246 - 0236

Company: CH2M HILL

Sample Source: (Indoor Air) / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas / (crawl space air)

Were "Instructions for Occupants" followed? *Yes* / (No)

If not, describe modifications: _____

Sample locations (floor, room): See report tables

SAMPLING DATA

Sample #	Location	Analytical Method	Sample Volume	Sample Time	Sample Date	Sampler Type	Ambient Temp (°F)

-Drawing of Sample Location(s) in Building

Type of field instrument used (include summary of results): None

Part VII - Meteorological Conditions See report text

Was there significant precipitation within 12 hours prior to (or during) the sampling event? *Yes / No*

Describe the general weather conditions: _____

_____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

_____

_____

_____

New Jersey Department of Environmental Protection

INDOOR AIR BUILDING SURVEY and SAMPLING FORM

Preparer's name: Jen Simms Date: 03/19/15

Preparer's affiliation: CH2M HILL Phone #: 610-246-0236

Site Name: Quanta Resources Superfund Site Case #: EPA# NJD000606442

Part I - Occupants

Building Address: 115 River Road Edgewater NJ - Building 7 1st Floor UFC Gym

Building Block: 93 Lot: 3.03

Property Contact: Danny Daibes (Owner) / Renter / other: _____

Contact's Phone: home ( )_____ work (201) 840-0050 cell (201) 321-9968

# of Building occupants: Children under age 13 _____ Children age 13-18 _____ Adults 3 employees and up to 25 customers working out at a time

Part II – Building Characteristics

Building type: residential / multi-family residential / office / strip mall / (commercial) / industrial

Describe building: 3 Story Brick Year constructed: early 1900s

Sensitive population: day care / nursing home / hospital / school / other (specify): _____

Number of floors below grade: 1 (full basement) / crawl space / slab on grade)

Number of floors at or above grade: 3

Depth of basement below grade surface: 4 ft. Bldg Footprint ~~Basement~~ size: 6400 ft²

Basement floor construction: (concrete) / dirt / floating / stone / other (specify): _____

Foundation walls: (poured concrete) / cinder blocks / stone / other (specify) _____

Basement sump present? (*Yes*) / *No* Sump pump? (*Yes*) / *No* Water in sump? (*Yes*) / *No*

Type of heating system (circle all that apply):

hot air circulation	hot air radiation	wood	steam radiation
heat pump	(hot water radiation)	kerosene heater	electric baseboard
other (specify): baseboards			

Type of ventilation system (circle all that apply):

(central air conditioning)	mechanical fans	bathroom ventilation fans
individual air conditioning units	kitchen range hood fan	outside air intake
other (specify): _____		

Type of fuel utilized (circle all that apply):

(Natural gas) / electric / fuel oil / wood / coal / solar / kerosene

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes* / (*No*)

Is there a whole house fan? *Yes* / (*No*)

Septic system? *Yes / Yes (but not used)* / (*No*)

Irrigation/private well? *Yes / Yes (but not used)* / (*No*)

Type of ground cover outside of building: grass / concrete / asphalt / other (specify) _____

Existing subsurface depressurization (radon) system in place? *Yes* / (*No*) *active / passive*

Sub-slab vapor/moisture barrier in place? *Yes* / (*No*)
Type of barrier: _____

Part III - Outside Contaminant Sources

NJDEP contaminated site (1000-ft. radius): Ramta Resources Superfund Site

Other stationary sources nearby (gas stations, emission stacks, etc.): Gas station ½ mile south, Hess facility 1 mile north

Heavy vehicular traffic nearby (or other mobile sources): River Road (5-lane busy road)

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment		
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents		
Oven cleaners		
Carpet / upholstery cleaners		
Other house cleaning products	Zep cleaning products	No
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor polish		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners		
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New furniture / upholstery		
New carpeting / flooring		NA
Hobbies - glues, paints, etc.		

Part V – Miscellaneous Items

Do any occupants of the building smoke? *Yes* / (No) How often? _____

Last time someone smoked in the building? _____ hours / *days* *ago*

Does the building have an attached garage directly connected to living space? *Yes* / (No)

If so, is a car usually parked in the garage? *Yes / No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes / No*

Do the occupants of the building have their clothes dry cleaned? *Yes* / (No)

If yes, how often? weekly / monthly / 3-4 times a year

Do any of the occupants use solvents in work? *Yes* / (No)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? *Yes / No*

Have any pesticides/herbicides been applied around the building or in the yard? *Yes* / (No)

If so, when and which chemicals? _____

Has there ever been a fire in the building? *Yes* / (No) If yes, when? _____

Has painting or staining been done in the building in the last 6 months? *Yes* / (No)

If yes, when _____ and where? _____

Part VI – Sampling Information

Sample Technician: Jen Simms Phone number: (610) 246 - 0236

Company: Ethan Hill

Sample Source: (Indoor Air) / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Were "Instructions for Occupants" followed? *Yes* / (No)

If not, describe modifications: _____

Sample locations (floor, room): See report tables

SAMPLING DATA

Sample #	Location	Analytical Method	Sample Volume	Sample Time	Sample Date	Sampler Type	Ambient Temp (°F)

-Drawing of Sample Location(s) in Building

See report figures

Type of field instrument used (include summary of results): None

Part VII - Meteorological Conditions See report text

Was there significant precipitation within 12 hours prior to (or during) the sampling event? *Yes / No*

Describe the general weather conditions: _____

_____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

_____

_____

_____

New Jersey Department of Environmental Protection

INDOOR AIR BUILDING SURVEY and SAMPLING FORM

Preparer's name: Jen Simms Date: May 19, 2015

Preparer's affiliation: CH2M HILL Phone #: 610-246-0236

Site Name: Quanta Resources Superfund Site Case #: _____

Part I - Occupants

Building Address: 115 River Road, Edgewater NJ - Building 7/8 Basement

Building Block: 93 Lot: 3.03

Property Contact: Danny Daibes (Owner) / Renter / other: _____

Contact's Phone: home ( )_____ work (201) 840-0050 cell (201) 321-9968

# of Building occupants: Children under age 13 ____ Children age 13-18 ____ Adults ____
Not occupied

Part II – Building Characteristics

Building type: residential / multi-family residential / office / strip mall / (commercial) / industrial

Describe building: 3 story brick Year constructed: early 1900s

Sensitive population: day care / nursing home / hospital / school / other (specify): _____

Number of floors below grade: 1 (full basement) / crawl space / slab on grade)

Number of floors at or above grade: 3

Depth of basement below grade surface: 4 ft. Bldg Footprint ~~Basement~~ size: _____ ft²

Basement floor construction: (concrete) / dirt / floating / stone / other (specify): _____

Foundation walls: (poured concrete) / cinder blocks / stone / other (specify) _____

Basement sump present? (Yes) / *No* Sump pump? (Yes) / *No* Water in sump? (Yes) / *No*

Type of heating system (circle all that apply):

hot air circulation	hot air radiation	wood	steam radiation
heat pump	hot water radiation	kerosene heater	electric baseboard

other (specify): one forced air unit in West Side

Type of ventilation system (circle all that apply):

central air conditioning	mechanical fans	bathroom ventilation fans
individual air conditioning units	kitchen range hood fan	outside air intake

other (specify): duct work through basement for vapor intrusion mitigation - see report for info

Type of fuel utilized (circle all that apply):

(Natural gas) / electric / fuel oil / wood / coal / solar / kerosene

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes* / (*No*)

Is there a whole house fan? *Yes / No* ventilation system

Septic system? *Yes / Yes (but not used)* / (*No*)

Irrigation/private well? *Yes / Yes (but not used)* / (*No*)

Type of ground cover outside of building: grass / concrete / (asphalt) / other (specify) _____

Existing subsurface depressurization (radon) system in place? *Yes* / (*No*) *active / passive*

Sub-slab vapor/moisture barrier in place? *Yes* / (*No*)
Type of barrier: _____

Part III - Outside Contaminant Sources

NJDEP contaminated site (1000-ft. radius): Quanta Resources Superfund Site

Other stationary sources nearby (gas stations, emission stacks, etc.): Gas Station 1/2 mile South, Hess facility 1 mile north

Heavy vehicular traffic nearby (or other mobile sources): River Road (5-lane busy road)

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment		
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents		
Oven cleaners		
Carpet / upholstery cleaners		
Other house cleaning products		
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor polish		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners		
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New furniture / upholstery		
New carpeting / flooring		NA
Hobbies - glues, paints, etc.		

Basement is empty, was cleaned out after Hurricain Sandy.

Part V – Miscellaneous Items

Do any occupants of the building smoke? *Yes / No* (NA) How often? _____

Last time someone smoked in the building? _____ hours / *days* *ago*

Does the building have an attached garage directly connected to living space? *Yes* / (No)

If so, is a car usually parked in the garage? *Yes / No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes / No*

Do the occupants of the building have their clothes dry cleaned? *Yes / No* (NA)

If yes, how often? weekly / monthly / 3-4 times a year

Do any of the occupants use solvents in work? *Yes / No* (NA)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? *Yes / No*

Have any pesticides/herbicides been applied around the building or in the yard? *Yes* / (No)

If so, when and which chemicals? _____

Has there ever been a fire in the building? *Yes* / (No) If yes, when? _____

Has painting or staining been done in the building in the last 6 months? *Yes* / (No)

If yes, when _____ and where? _____

Part VI – Sampling Information

Sample Technician: Jen Simms Phone number: (610) 246 - 0236

Company: CH2M HILL

Sample Source: (Indoor Air) / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Were "Instructions for Occupants" followed? *Yes* / (No) – NA

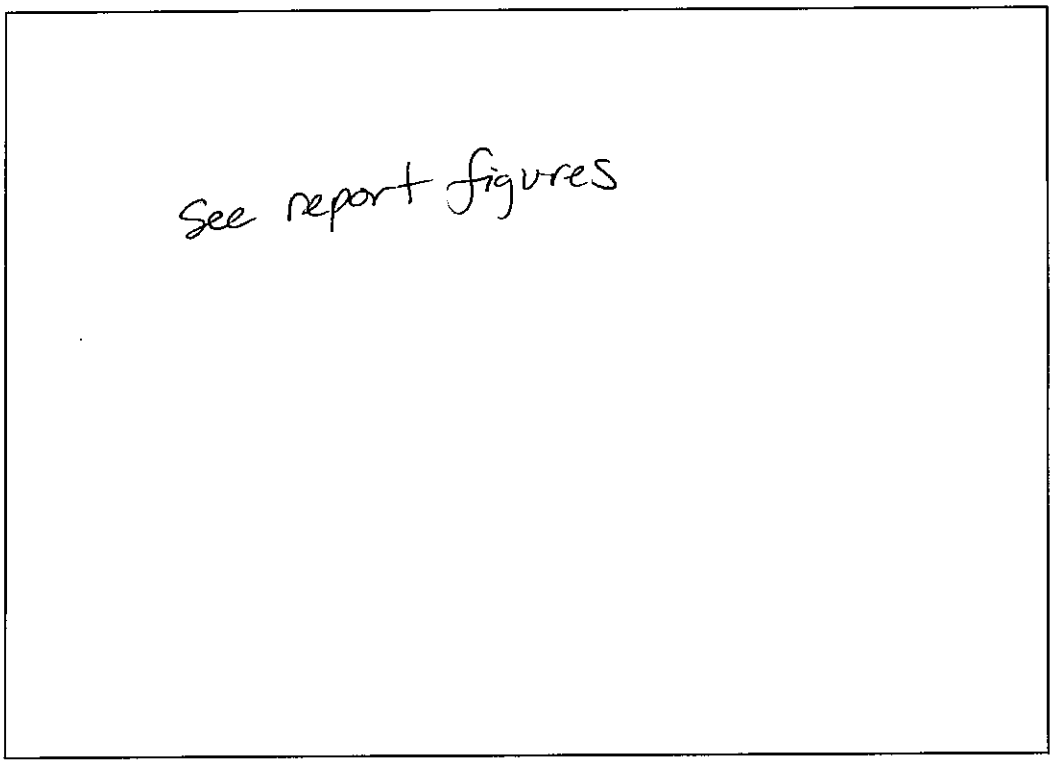
If not, describe modifications: _____

Sample locations (floor, room): See report tables

SAMPLING DATA

Sample #	Location	Analytical Method	Sample Volume	Sample Time	Sample Date	Sampler Type	Ambient Temp (°F)

-Drawing of Sample Location(s) in Building



Type of field instrument used (include summary of results): None

Part VII - Meteorological Conditions See report text

Was there significant precipitation within 12 hours prior to (or during) the sampling event? *Yes / No*

Describe the general weather conditions: _____

_____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

_____

_____

_____

New Jersey Department of Environmental Protection

INDOOR AIR BUILDING SURVEY and SAMPLING FORM

Preparer's name: Jen Simms Date: 03/10/15

Preparer's affiliation: CH2M HILL Phone #: 610-246-0236

Site Name: Quanta Resources Superfund Site Case #: EPA# NJD000606442

Part I - Occupants

Building Address: 115 River Road, Edgewater NJ - Building 8

Building Block: 93 Lot: 3.03 two tenant spaces sampled 1. 2nd Floor 2. 3rd Floor - ION

Property Contact: Danny Daibes (Owner) / Renter / other: _____

Contact's Phone: home ( ) _____ work (201) 840 0050 cell (201) 321-9968

# of Building occupants: Children under age 13 ____ Children age 13-18 ____ Adults ____

2nd Floor - 2-4 adult workers
3rd Floor - 12 adult workers

Part II – Building Characteristics

Building type: residential / multi-family residential / (office) / strip mall / commercial / industrial

Describe building: 3 story brick building Year constructed: early 1900s

Sensitive population: day care / nursing home / hospital / school / other (specify): None

Number of floors below grade: 1 (full basement) / crawl space / slab on grade)

Number of floors at or above grade: 3

Depth of basement below grade surface: 4 ft. Basement size: _____ ft²

Basement floor construction: (concrete) / dirt / floating / stone / other (specify): _____

Foundation walls: (poured concrete) / cinder blocks / stone / other (specify) _____

Basement sump present? (Yes) / No Sump pump? (Yes) / No Water in sump? (Yes) / No

Type of heating system (circle all that apply): 2nd floor has electric baseboard and plug in unit

hot air circulation	hot air radiation	wood	steam radiation
heat pump	hot water radiation	kerosene heater	electric baseboard

other (specify): 3rd floor has hot air circulation

Type of ventilation system (circle all that apply):

Both 2nd and 3rd floors

(central air conditioning)	mechanical fans	bathroom ventilation fans
individual air conditioning units	kitchen range hood fan	outside air intake

other (specify): _____

Type of fuel utilized (circle all that apply):

(Natural gas) / electric / fuel oil / wood / coal / solar / kerosene

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes* / (*No*)

Is there a whole house fan? *Yes* / (*No*)

Septic system? *Yes / Yes (but not used)* / (*No*)

Irrigation/private well? *Yes / Yes (but not used)* / (*No*)

Type of ground cover outside of building: grass / concrete / (asphalt) / other (specify) _____

Existing subsurface depressurization (radon) system in place? *Yes* / (*No*) *active / passive*

Sub-slab vapor/moisture barrier in place? *Yes* / (*No*)
Type of barrier: _____

Part III - Outside Contaminant Sources

NJDEP contaminated site (1000-ft. radius): Quanta Resources Superfund Site

Other stationary sources nearby (gas stations, emission stacks, etc.): Gas station 1/2 mile South, Hess facility 1 mile north

Heavy vehicular traffic nearby (or other mobile sources): River Road (5-lane busy road)

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment		
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents		
Oven cleaners		
Carpet / upholstery cleaners		
Other house cleaning products		
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor polish		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners		
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New furniture / upholstery		
New carpeting / flooring		NA
Hobbies - glues, paints, etc.		

2nd floor - none

3rd floor - spray paint - not removed

Part V – Miscellaneous Items

Do any occupants of the building smoke? *Yes* / (*No*) How often? _____

Last time someone smoked in the building? _____ hours / *days* *ago*

Does the building have an attached garage directly connected to living space? *Yes* / (*No*)

If so, is a car usually parked in the garage? *Yes / No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes / No*

Do the occupants of the building have their clothes dry cleaned? *Yes / No*

If yes, how often? weekly / monthly / 3-4 times a year

3rd floor – yes, weekly
2nd floor - no

Do any of the occupants use solvents in work? *Yes* / (*No*)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? *Yes / No*

Have any pesticides/herbicides been applied around the building or in the yard? *Yes* / (No)

If so, when and which chemicals? _____

Has there ever been a fire in the building? *Yes* / (*No*) If yes, when? _____

Has painting or staining been done in the building in the last 6 months? *Yes* / (*No*)

If yes, when _____ and where? _____

Part VI – Sampling Information

Sample Technician: Jen Simms Phone number: (610) 246 - 0236

Company: CH2M HILL

Sample Source: (Indoor Air) / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Were "Instructions for Occupants" followed? Yes / (*No*)

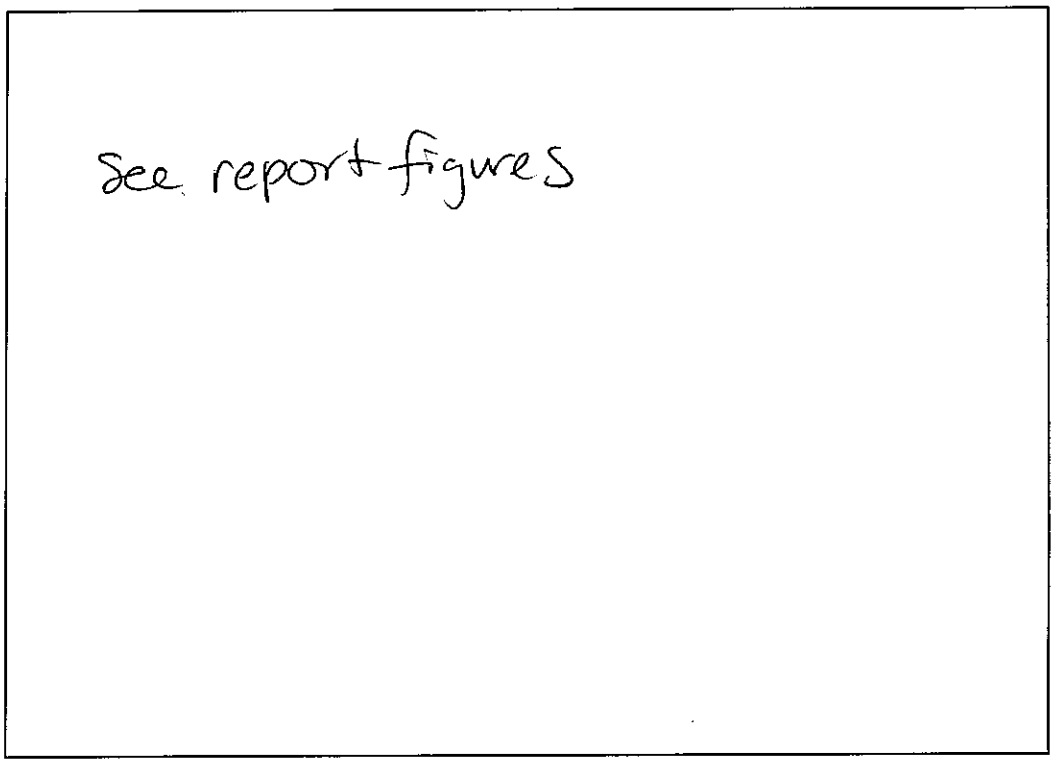
If not, describe modifications: _____

Sample locations (floor, room): See report tables

SAMPLING DATA

Sample #	Location	Analytical Method	Sample Volume	Sample Time	Sample Date	Sampler Type	Ambient Temp (°F)

-Drawing of Sample Location(s) in Building



Type of field instrument used (include summary of results): None

Part VII - Meteorological Conditions See report text

Was there significant precipitation within 12 hours prior to (or during) the sampling event? *Yes / No*

Describe the general weather conditions: _____

_____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

_____

_____

_____

New Jersey Department of Environmental Protection

INDOOR AIR BUILDING SURVEY and SAMPLING FORM

Preparer's name: Jen Simms Date: 03/10/15

Preparer's affiliation: CH2M HILL Phone #: 610-246-0236

Site Name: Quanta Resources Superfund Site Case #: EPA # NJD000606442

Part I - Occupants

Building Address: 115 River Road, Edgewater NJ - Building 9

Building Block: 93 Lot: 3.03 1st floor tenant is Osteo Relief 201-840-1980

Property Contact: Danny Daibes (Owner) / Renter / other: _____

Contact's Phone: home ( )_____ work (201) 840-0050 cell (201) 321-9968

# of Building occupants: Children under age 13 ____ Children age 13-18 ____ Adults ~20 staff PWS varying # of patients

Part II – Building Characteristics

Building type: residential / multi-family residential / (office) / strip mall / (commercial) / industrial

Describe building: 3 story brick Year constructed: early 1900s

Sensitive population: day care / nursing home / hospital / school / other (specify): Physical therapy office

Number of floors below grade: 1 (full basement) / crawl space / slab on grade)

Number of floors at or above grade: 3

Depth of basement below grade surface: 4 ft. Footprint ~~Basement~~ size: 3,200 ft²

Basement floor construction: concrete / dirt / floating / stone / other (specify): _____

Foundation walls: poured concrete / cinder blocks / stone / other (specify) _____

Basement sump present? (Yes) / No Sump pump? (Yes) / No Water in sump? (Yes) / No

Type of heating system (circle all that apply):

(hot air circulation)	hot air radiation	wood	steam radiation
heat pump	hot water radiation	kerosene heater	electric baseboard

other (specify): _____ Combined HVAC vents along ceiling

Type of ventilation system (circle all that apply):

(central air conditioning)	mechanical fans	bathroom ventilation fans
individual air conditioning units	kitchen range hood fan	outside air intake

other (specify): _____

Type of fuel utilized (circle all that apply):

(Natural gas) / electric / fuel oil / wood / coal / solar / kerosene

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes* / (*No*)

Is there a whole house fan? *Yes* / (*No*)

Septic system? *Yes / Yes (but not used)* / (*No*)

Irrigation/private well? *Yes / Yes (but not used)* / (*No*)

Type of ground cover outside of building: grass / concrete / (asphalt) / other (specify) _____

Existing subsurface depressurization (radon) system in place? *Yes / No* *active / passive*

Sub-slab vapor/moisture barrier in place? *Yes* / (*No*)
Type of barrier: _____

Part III - Outside Contaminant Sources

NJDEP contaminated site (1000-ft. radius): Quanta Resources Superfund Site

Other stationary sources nearby (gas stations, emission stacks, etc.): Gas Station ½ mile South, Hess facility 1 mile North

Heavy vehicular traffic nearby (or other mobile sources): River Road - 5 lane busy road

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment		
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents		
Oven cleaners		
Carpet / upholstery cleaners		
Other house cleaning products	typical cleaning products - lysol	No
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor polish		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners	used throughout building	No
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New furniture / upholstery		
New carpeting / flooring		NA
Hobbies - glues, paints, etc.		

OsteoRelief has a cleaning service 3-4 times per week

Part V – Miscellaneous Items

Not inside the bldg. Workers and patients may smoke outside the front door.

Do any occupants of the building smoke? *Yes / No* How often? _____

Last time someone smoked in the building? _____ hours / *days* *ago*

Does the building have an attached garage directly connected to living space? *Yes* / (No)

If so, is a car usually parked in the garage? *Yes / No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes / No*

Do the occupants of the building have their clothes dry cleaned? *Yes / No* Patients might

If yes, how often? weekly / monthly / 3-4 times a year Staff launders their uniforms

Do any of the occupants use solvents in work? *Yes* (No)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? *Yes / No*

Have any pesticides/herbicides been applied around the building or in the yard? *Yes* / (No)

If so, when and which chemicals? _____

Has there ever been a fire in the building? *Yes / No* If yes, when? _____

Has painting or staining been done in the building in the last 6 months? *Yes* / (No)

If yes, when _____ and where? _____

Part VI – Sampling Information

Sample Technician: Jen Simms Phone number: (610) 246 - 0236

Company: CH2M HILL

Sample Source: (Indoor Air) / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Were "Instructions for Occupants" followed? *Yes* / (No)

If not, describe modifications: _____

Sample locations (floor, room): See report tables

SAMPLING DATA

Sample #	Location	Analytical Method	Sample Volume	Sample Time	Sample Date	Sampler Type	Ambient Temp (°F)

-Drawing of Sample Location(s) in Building

Type of field instrument used (include summary of results): none

Part VII - Meteorological Conditions See report text

Was there significant precipitation within 12 hours prior to (or during) the sampling event? *Yes / No*

Describe the general weather conditions: _____

_____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

_____

_____

_____

New Jersey Department of Environmental Protection

INDOOR AIR BUILDING SURVEY and SAMPLING FORM

Preparer's name: Jen Simms Date: 03/10/15

Preparer's affiliation: CH2M HILL Phone #: 610-296-0236

Site Name: Quanta Resources Superfund Site Case #: EPA# NJD000606442

Part I - Occupants

Building Address: 115 River Road, Edgewater NJ - Building 10

Building Block: 93 Lot: 3.03

Property Contact: Danny Daibes (Owner) / Renter / other: _____

Contact's Phone: home ( ) _____ work (201) 840-0050 cell (201) 321-9968

# of Building occupants: Children under age 13 _____ Children age 13-18 _____ Adults _____ See below

Part II – Building Characteristics

Building type: residential / multi-family residential / (office) / strip mall / (commercial) / industrial

Describe building: 3 story brick Year constructed: early 1900s

Sensitive population: day care / nursing home / hospital / school / other (specify): Suite 1003 pediatric office

Number of floors below grade: 1 (full basement) crawl space / slab on grade)

Number of floors at or above grade: 3

Depth of basement below grade surface: 4 ft. Basement size: 4,800 ft²

Basement floor construction: (concrete) / dirt / floating / stone / other (specify): _____

Foundation walls: (poured concrete) / (cinder blocks) / stone / other (specify) _____

Basement sump present? (Yes) / No Sump pump? (Yes) / No Water in sump? (Yes) / No

Type of heating system (circle all that apply):

(hot air circulation)	hot air radiation	wood	steam radiation
heat pump	hot water radiation	kerosene heater	electric baseboard

other (specify): _____

Same ducts

Type of ventilation system (circle all that apply):

(central air conditioning)	mechanical fans	bathroom ventilation fans
individual air conditioning units	kitchen range hood fan	outside air intake

other (specify): _____

Type of fuel utilized (circle all that apply):

(Natural gas) electric / fuel oil / wood / coal / solar / kerosene

→ 3 Spaces sampled in Bldg 10

1. Unoccupied basement - used for storage, rarely accessed
2. Suite 1001 Hippee Print - 2 to 3 workers, and customers (few at a time)
3. Suite 1003 Pediatric Office - 4 workers plus patients

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes* / (No)

Is there a whole house fan? *Yes* / (No)

Septic system? *Yes / Yes (but not used)* / (No)

Irrigation/private well? *Yes / Yes (but not used)* / (No)

Type of ground cover outside of building: grass / concrete / (asphalt) / other (specify) _____

Existing subsurface depressurization (radon) system in place? *Yes* / (No) *active / passive*

Sub-slab vapor/moisture barrier in place? *Yes* / (No)
Type of barrier: _____

Part III - Outside Contaminant Sources

NJDEP contaminated site (1000-ft. radius): Quanta Resources Superfund Site

Other stationary sources nearby (gas stations, emission stacks, etc.): Gas Station ½ mile South, Hess facility 1 mile north

Heavy vehicular traffic nearby (or other mobile sources): River Road - 5 lane busy road

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment		
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents		
Oven cleaners		
Carpet / upholstery cleaners		
Other house cleaning products		
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor polish		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners		
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New furniture / upholstery		
New carpeting / flooring		NA
Hobbies - glues, paints, etc.		

Printing Shop – no cleaning service, but printers & inks present
Pediatric office - cleaning service two times per week

Print Shop - Silicone lubricant, glue, denatured alcohol

Part V – Miscellaneous Items

Do any occupants of the building smoke? Not inside the building *Yes / No* How often? _____

Last time someone smoked in the building? _____ hours / *days* ago

Does the building have an attached garage directly connected to living space? *Yes / (No)*

If so, is a car usually parked in the garage? *Yes / No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes / No*

Do the occupants of the building have their clothes dry cleaned? *Yes / No* Maybe some workers or patients

If yes, how often? weekly / monthly / 3-4 times a year

Do any of the occupants use solvents in work? *Yes / (No)*

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? *Yes / No*

Have any pesticides/herbicides been applied around the building or in the yard? *Yes / (No)*

If so, when and which chemicals? _____

Has there ever been a fire in the building? *Yes / No* If yes, when? _____

Has painting or staining been done in the building in the last 6 months? *Yes / (No)*

If yes, when _____ and where? _____

Part VI – Sampling Information

Sample Technician: Jen Simms Phone number: (610) 246-0236

Company: CH2M HILL

Sample Source: (Indoor Air) / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Were "Instructions for Occupants" followed? *Yes / (No)*

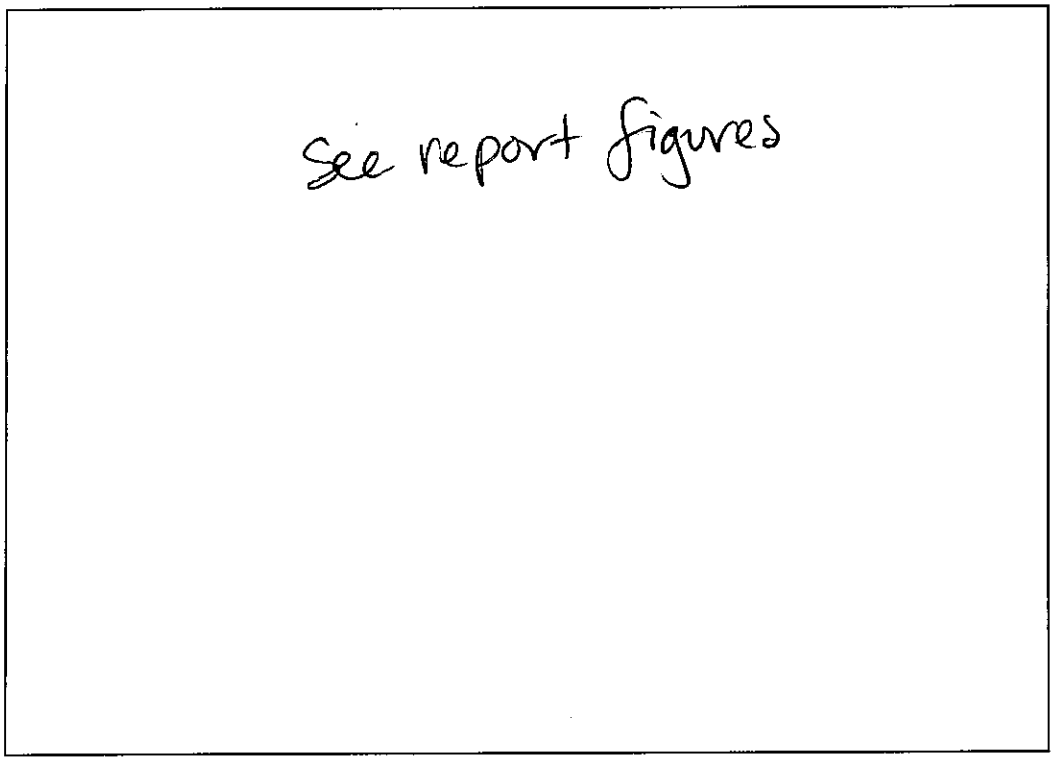
If not, describe modifications: _____

Sample locations (floor, room): See report tables

SAMPLING DATA

Sample #	Location	Analytical Method	Sample Volume	Sample Time	Sample Date	Sampler Type	Ambient Temp (°F)

-Drawing of Sample Location(s) in Building



Type of field instrument used (include summary of results): none

Part VII - Meteorological Conditions See report text

Was there significant precipitation within 12 hours prior to (or during) the sampling event? *Yes / No*

Describe the general weather conditions: _____

_____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

_____

_____

_____

New Jersey Department of Environmental Protection

INDOOR AIR BUILDING SURVEY and SAMPLING FORM

Preparer's name: Jen Simms Date: 03/10/15

Preparer's affiliation: CH2M HILL Phone #: 610-246-0236

Site Name: Quanta Resources Superfund Site Case #: EPA # NJD000606442

Part I - Occupants

Building Address: 115 River Road, Edgewater NJ - Building 11

Building Block: 93 Lot: 3.03

Property Contact: Danny Daibes (Owner) / Renter / other: _____

Contact's Phone: home ( )_____ work (201) 840-0050 cell (201) 321-9968

# of Building occupants: Children under age 13 ____ Children age 13-18 ____ Adults typical occupancy CrossFit Gym - 1-2 employees 5-40 people working out

Part II – Building Characteristics

Building type: residential / multi-family residential / (office) / strip mall / (commercial) / industrial

Describe building: 3 Story brick Year constructed: _____

Sensitive population: day care / nursing home / hospital / school / other (specify): _____

Number of floors below grade: 0 (full basement / crawl space / ~~slab on grade~~)

Number of floors at or above grade: 3

Depth of basement below grade surface: 0 ft. ~~Basement~~ Footprint size: 3,200 ft²

Basement floor construction: (concrete) / dirt / floating / stone / other (specify): _____

Foundation walls: poured concrete / cinder blocks / stone / other (specify) Unknown

Basement sump present? *Yes* / (*No*) Sump pump? *Yes* / (*No*) Water in sump? *Yes* / *No*

Type of heating system (circle all that apply):

~~hot air circulation~~	hot air radiation	wood	steam radiation
heat pump	hot water radiation	kerosene heater	electric baseboard

other (specify): _____

Type of ventilation system (circle all that apply):

(central air conditioning)	mechanical fans	bathroom ventilation fans
individual air conditioning units	kitchen range hood fan	outside air intake

other (specify): _____

Type of fuel utilized (circle all that apply):

(Natural gas) / electric / fuel oil / wood / coal / solar / kerosene

→ 1st floor is a former bank, now its a Cross-Fit Gym

2nd & 3rd floors are office space

Sampling on 1st floor only

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? *Yes* / (No)

Is there a whole house fan? *Yes* / (No)

Septic system? *Yes / Yes (but not used)* / (No)

Irrigation/private well? *Yes / Yes (but not used)* / (No)

Type of ground cover outside of building: grass / concrete / (asphalt) / other (specify) _____

Existing subsurface depressurization (radon) system in place? *Yes* / (No) *active / passive*

Sub-slab vapor/moisture barrier in place? *Yes* / (No) – unknown

Type of barrier: _____

Part III - Outside Contaminant Sources

NJDEP contaminated site (1000-ft. radius): Quanta Resources Superfund Site

Other stationary sources nearby (gas stations, emission stacks, etc.): Gas station 1/2 mile South, Hess Facility 1 mile north

Heavy vehicular traffic nearby (or other mobile sources): River Road - 5 lane busy road

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment		
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents		
Oven cleaners		
Carpet / upholstery cleaners		
Other house cleaning products		
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor polish		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners	In bathrooms	no
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New furniture / upholstery		
New carpeting / flooring		NA
Hobbies - glues, paints, etc.		

Lysol & other typical cleaning products used

Part V – Miscellaneous Items

Do any occupants of the building smoke? *Yes / (No)* How often? _____

Last time someone smoked in the building? _____ hours / *days* *ago*

Does the building have an attached garage directly connected to living space? *Yes / (No)*

If so, is a car usually parked in the garage? *Yes / No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes / No*

Do the occupants of the building have their clothes dry cleaned? *Yes / (No)*

If yes, how often? weekly / monthly / 3-4 times a year

Do any of the occupants use solvents in work? *Yes / (No)*

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? *Yes / No*

Have any pesticides/herbicides been applied around the building or in the yard? *Yes / (No)*

If so, when and which chemicals? _____

Has there ever been a fire in the building? *Yes / (No)* If yes, when? _____

Has painting or staining been done in the building in the last 6 months? *Yes / (No)*

If yes, when _____ and where? _____

Part VI – Sampling Information

Sample Technician: Jen Simms Phone number: (60) 246-0236

Company: CH2M HILL

Sample Source: (Indoor Air) / Sub-Slab / Near Slab Soil Gas / Exterior Soil Gas

Were "Instructions for Occupants" followed? *Yes / (No)*

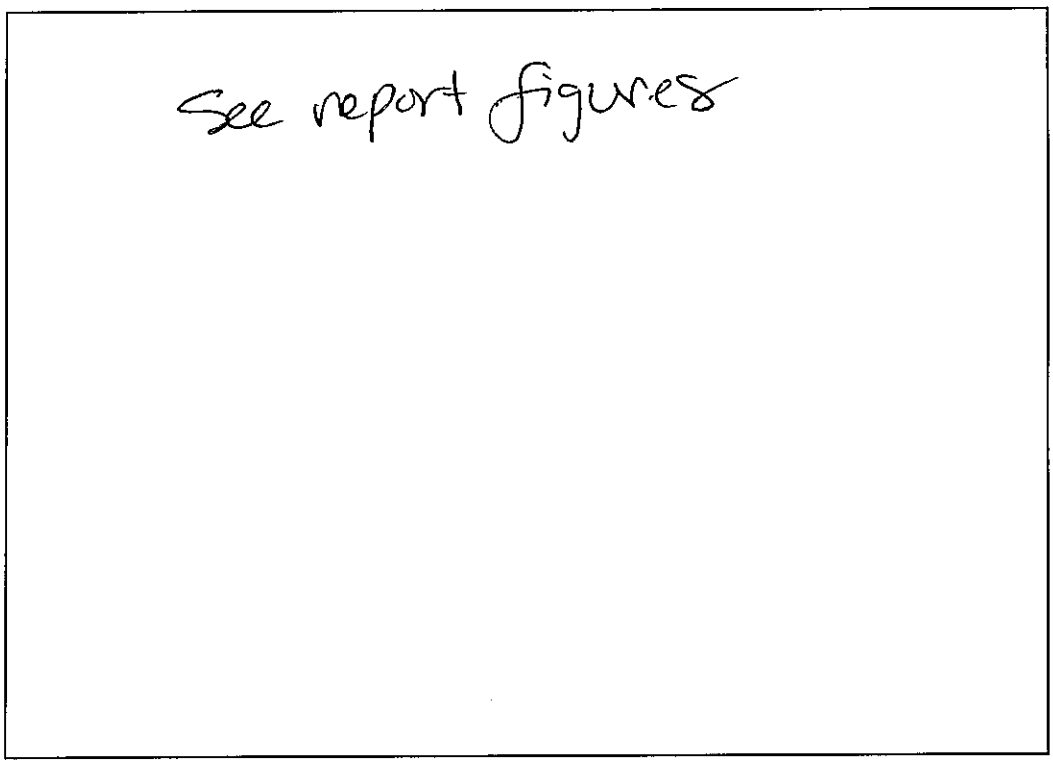
If not, describe modifications: _____

Sample locations (floor, room): See report tables

SAMPLING DATA

Sample #	Location	Analytical Method	Sample Volume	Sample Time	Sample Date	Sampler Type	Ambient Temp (°F)

-Drawing of Sample Location(s) in Building



Type of field instrument used (include summary of results): none

Part VII - Meteorological Conditions See report text

Was there significant precipitation within 12 hours prior to (or during) the sampling event? *Yes / No*

Describe the general weather conditions: _____

_____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

_____

_____

_____

New Jersey Department of Environmental Protection

INDOOR AIR BUILDING SURVEY and SAMPLING FORM

Preparer's name: Jen Simms /CH2M HILL Date: 03/10/15

Preparer's affiliation: CH2M HILL Phone #: 610 246 0236

Site Name: Quanta Resources Superfund Site Case #: EPA # NJD000606442

Part I - Occupants

Building Address: 163 Old River Road, Edgewater NJ

Building Block: 93 Lot: ______

Property Contact: Scott Heagney (Owner circled) / Renter / other: ______

Contact's Phone: home ( ) ______ work (201) 945 8647 cell (201) 838-4642

# of Building occupants: Children under age 13 ____ Children age 13-18 ____ Adults ____
~10 workers, # of customers varies from 10-100 at times

Part II – Building Characteristics

Restaurant

Building type: residential / multi-family residential / office / strip mall / (commercial circled) / industrial

Describe building: 2 Story Year constructed: Unknown

Sensitive population: day care / nursing home / hospital / school / other (specify): none

Number of floors below grade: ____ (full basement / (crawl space circled) partial / (slab on grade circled) partial)

Number of floors at or above grade: 2

Depth of basement below grade surface: 0 ft. Basement size: ____ ft²

~~Basement floor~~ Slab construction: (concrete circled) / dirt / floating / stone / other (specify): ______

Foundation walls: poured concrete / cinder blocks / stone / other (specify) Unknown

Basement sump present? *Yes / No* Sump pump? *(Yes circled) / No* Water in sump? *Yes / No*
Sump present on 1st floor

Type of heating system (circle all that apply):

- (hot air circulation circled)
- hot air radiation
- wood
- steam radiation
- heat pump
- (hot water radiation circled)
- kerosene heater
- electric baseboard
- other (specify): baseboards in 1st Floor dining room

Type of ventilation system (circle all that apply):

- (central air conditioning circled)
- mechanical fans
- (bathroom ventilation fans circled)
- individual air conditioning units
- (kitchen range hood fan circled)
- outside air intake
- other (specify): ______

Kept on during sampling

Type of fuel utilized (circle all that apply):

(Natural gas circled) / electric / fuel oil / wood / coal / solar / kerosene

Are the ~~basement walls or~~ slab floor sealed with waterproof paint or epoxy coatings? (Yes) / No — in kitchen & storage room

Is there a whole house fan? Yes / (No) — vent fans over stove - on during sampling per EPA instruction

Septic system? Yes / Yes (but not used) / (No)

Irrigation/private well? Yes / Yes (but not used) / (No)

Type of ground cover outside of building: grass / concrete / (asphalt) / other (specify) _____

Existing subsurface depressurization (radon) system in place? Yes / (No) active / passive

Sub-slab vapor/moisture barrier in place? Yes / (No)
Type of barrier: _____

Part III - Outside Contaminant Sources

NJDEP contaminated site (1000-ft. radius): Quanta Resources Superfund Site Hess facility

Other stationary sources nearby (gas stations, emission stacks, etc.): Gas Station ½ mile south, 1 mile north

Heavy vehicular traffic nearby (or other mobile sources): River Road - Sloane busy road

Part IV – Indoor Contaminant Sources

Identify all potential indoor sources found in the building (including attached garages), the location of the source (floor and room), and whether the item was removed from the building 48 hours prior to indoor air sampling event. Any ventilation implemented after removal of the items should be completed at least 24 hours prior to the commencement of the indoor air sampling event.

Potential Sources	Location(s)	Removed (Yes / No / NA)
Gasoline storage cans		
Gas-powered equipment	leaf blower in kitchen storage room	
Kerosene storage cans		
Paints / thinners / strippers		
Cleaning solvents		
Oven cleaners	Kitchen, storage room	No
Carpet / upholstery cleaners		
Other house cleaning products	Kitchen, storage room Ecolab	No
Moth balls		
Polishes / waxes		
Insecticides		
Furniture / floor polish		
Nail polish / polish remover		
Hairspray		
Cologne / perfume		
Air fresheners	Strong odor in bathrooms	No
Fuel tank (inside building)		NA
Wood stove or fireplace		NA
New furniture / upholstery		
New carpeting / flooring		NA
Hobbies - glues, paints, etc.		

Watco Rejuvenating Oil for Finish Wood - contains mineral spirits
Ecolab dishwashing and cleaning products
Easy off oven cleaner

reports of occasional smoking in building - both workers and late night bar customers

Part V – Miscellaneous Items

Do any occupants of the building smoke? *Yes / No* How often? _____

Last time someone smoked in the building? _____ hours / *days* ago unknown

Does the building have an attached garage directly connected to living space? *Yes* / (*No*)

If so, is a car usually parked in the garage? *Yes / No*

Are gas-powered equipment or cans of gasoline/fuels stored in the garage? *Yes / No*

Do the occupants of the building have their clothes dry cleaned? *Yes / No* Maybe customers

If yes, how often? weekly / monthly / 3-4 times a year

Do any of the occupants use solvents in work? *Yes* / (*No*)

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? *Yes / No*

Have any pesticides/herbicides been applied around the building or in the yard? (*Yes*) No

If so, when and which chemicals? Bi-weekly Tempo SC (11.6% Cyfluthrin)

Has there ever been a fire in the building? *Yes* / (*No*) If yes, when? _____

Has painting or staining been done in the building in the last 6 months? (*Yes*) / *No*

If yes, when approx 6 months ago and where? Entire interior was remodeled. Italian restaurant to Mexican restaurant New flooring, new paint almost everywhere

Part VI – Sampling Information

Sample Technician: Jen Simms Phone number: (610) 246 - 0236

Company: CH2M HILL

Sample Source: (Indoor Air) (Sub-Slab) / Near Slab Soil Gas / Exterior Soil Gas

Were "Instructions for Occupants" followed? Yes / (*No*)

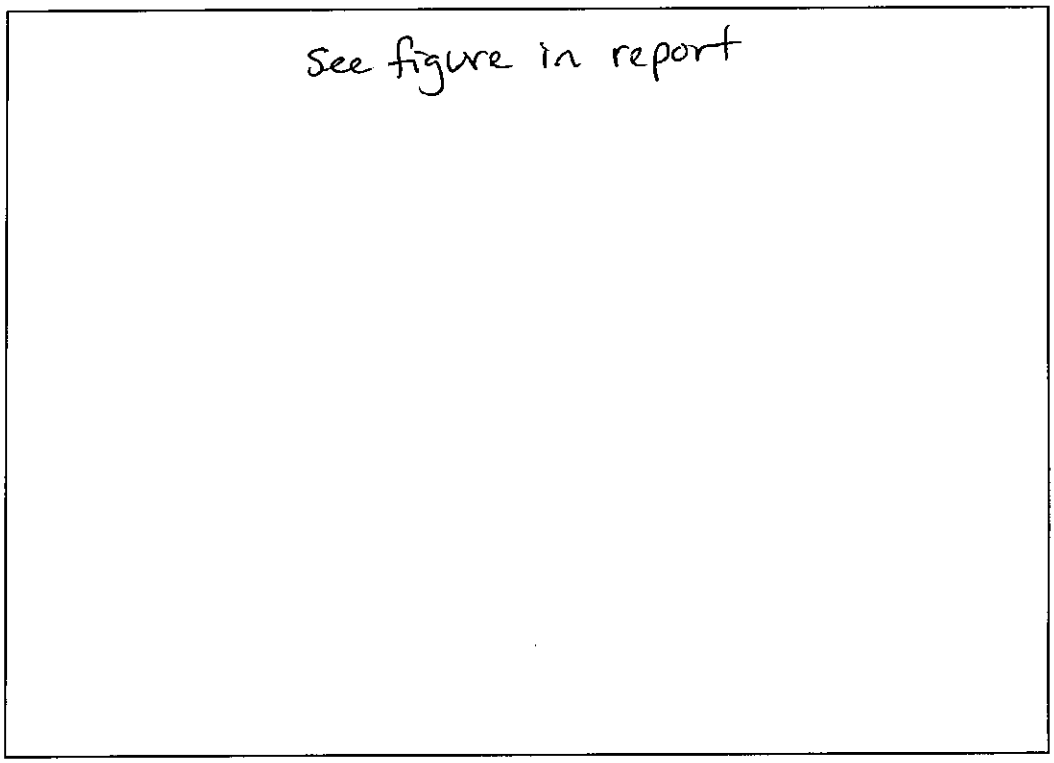
If not, describe modifications: _____

Sample locations (floor, room): See Table in report

SAMPLING DATA

Sample #	Location	Analytical Method	Sample Volume	Sample Time	Sample Date	Sampler Type	Ambient Temp (°F)

-Drawing of Sample Location(s) in Building



Type of field instrument used (include summary of results): Purged subslab soil gas Screened with PID and GEM2000. See table in report

Part VII - Meteorological Conditions See report text

Was there significant precipitation within 12 hours prior to (or during) the sampling event? *Yes* / (*No*)

Describe the general weather conditions: _____

_____

Part VIII – General Observations

Provide any information that may be pertinent to the sampling event and may assist in the data interpretation process.

_____

_____

_____

Attachment D
Chain of Custody Forms

Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle:
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) (10-Day-Standard)

ALS Project No: P1500968

Company Name & Address (Reporting Information): CH2M HILL, 18 Tremont St, Suite 800, Boston MA 02108

Project Name: Quanta Resources 115 RR 2014/2015 VI

Project Number: 499159.HW.20.24.RR

Project Manager: Kyle Block

P.O. # / Billing Information: CH2M HILL A/P, PO Box 241329, Denver CO 80224

Phone: 617-626-7013

Fax:

Email Address for Result Reporting: Kyle.Block@ch2m.com

Sampler (Print & Sign): Jen Simms

ALS Contact: Kate Aguilera

Analysis Method: TO-15 List B or SOW; TO-15 SIM Naphthalene

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TO-15 List B or SOW	TO-15 SIM Naphthalene	Comments e.g. Actual Preservative or specific instructions
Q1-IA-42-031115	1	03/11/15	15:13	AC01881	FCA00843	-30.14	-3.10	6L	X	X	
Q1-IA-43-031115	2	03/11/15	15:11	AC01036	FCA00706	-30.38	-2.90	6L	X	X	
Q1-IA-40-031115	3	03/11/15	15:54	AC00714	FCA00495	-30.30	-4.97	6L	X	X	
~~Q1-IA-41-031115~~	~~4~~	~~03/11/15~~		~~AC01606~~	~~FCA00101~~	~~-30.27~~		~~6L~~	~~X~~	~~X~~	~~DNS~~
Q1-IA-22-031115	5	03/11/15	11:29	AC00870	FCA00694	-30.21	-3.70	6L	X	X	
~~Q1-IA-03-031115~~	~~6~~	~~13/11/15~~		~~AS00851~~	~~FCA00963~~	~~-30.20~~		~~6L~~	~~X~~	~~X~~	~~DNS~~
Q1-IA-44-031115	7	03/11/15	11:40	AC02036	FCA00482	-30.27	-1.16	6L	X	X	
Q1-IA-45-031115	8	03/11/15	11:39	AC02046	FCA00266	-30.35	-2.93	6L	X	X	
Q1-IA-39-031115	9	03/11/15	11:56	AS00~~85~~8703	FCA00428	-30.32	-4.25	6L	X	X	
Q1-OA-03-031115	10	03/11/15	12:03	AS00858	FCA00034	-30.35	-1.47	6L	X	X	

Report Tier Levels - please select: Reporting per SOW → NJDEP requirements

Tier I - Results (Default if not specified) _____ Tier III (Results + QC & Calibration Summaries) _____

Tier II (Results + QC Summaries _____ Tier IV (Data Validation Package) 10% Surcharge _____

EDD required YES / No

Type: _____ Units: _____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Jen Simms	03/11/15	18:00	FED EX		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
FED EX				3/12/15	0730

Cooler / Blank Temperature ____ °C

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) (10-Day-Standard)

ALS Project No P1501072

Company Name & Address (Reporting Information)
CH2M HILL
18 Tremont St. Suite 700
Boston MA 02108

Project Name: Quanta Resources 115 RR 2014/2015 VI
Project Number: 499159.20.24.RR

ALS Contact: Kade Aguilera

Project Manager: Kyle Block

P.O. # / Billing Information: CH2M HILL A/P
PO BOX 2413-29
Denver CO 80224

Phone: 617-626-7013
Fax:

Email Address for Result Reporting: Kyle.Block@ch2m.com

Sampler (Print & Sign): Jen Simms

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TO-15 List per SOW	Naphthalene TO-15 SIM per SOW	Comments e.g. Actual Preservative or specific instructions
Q1-IA-32-031215	1	03/12/15	15:19	AS00243	FCA00492	-30.28	-4.85	6L	X	X	
Q1-IA-13-031215	2	03/12/15	15:58	AC01638	FCA00178	-30.05	-1.33	6L	X	X	
Q1-IA-35-031215	3	03/12/15	15:23	AS00657	FCA00854	-30.20	-4.03	6L	X	X	
Q1-IA-41-031215	4	03/12/15	10:00	AC01804	FCA00730	-30.42	-5.25	6L	X	X	
Q1-CS-04-031215	5	03/12/15	15:15	AC01840	FCA00079	-30.19	-1.26	6L	X	X	
Q1-CS-05-031215	6	03/12/15	15:56	AS00388	FCA00262	-30.17	-4.23	6L	X	X	
Q1-CS-07-031215	7	03/12/15	15:13	AC00726	FCA00911	-30.18	-1.19	6L	X	X	
Q1-OA-09-031215	8	03/12/15	15:12	AS00823	FCA00635	-30.17	-4.50	6L	X	X	
Q1-IA-03-031015	9	03/10/15	11:30	AS00851	FCA00963	-30.20	-0.23	6L	X	X	Hold
	10			AC01606	FCA00401						Do not analyze

Report Tier Levels - please select
Tier I - Results (Default if not specified) ____ Tier III (Results + QC & Calibration Summaries) ____ Reporting per SOW ⇒ NJDEP requirements
Tier II (Results + QC Summaries ____ Tier IV (Data Validation Package) 10% Surcharge ____
EDD required YES / No
Type: _____ Units: _____
Chain of Custody Seal (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Jen Simms	03/12/15	16:35	FED EX		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
FED EX				3/16/15	10:30

Cooler / Blank Temperature ____ °C

Revised 4-14-15 B.Kidd

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle:
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) (10-Day-Standard)

ALS Project No

Company Name & Address (Reporting Information): CH2M HILL, 18 Tremont St Suite 700, Boston MA 02108

Project Name: Quanta Resources 115 RR 2014/2015 VI

Project Number: 499159.20.24.RR

Project Manager: Kyle Block

P.O. # / Billing Information: CH2M HILL A/P, PO Box 241329, Denver CO 80224

Phone: 617-626-7013 | Fax:

Email Address for Result Reporting: Kyle.Block@ch2m.com

Sampler (Print & Sign):

ALS Contact: Kate Aguilera

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method: TO-15 List Per SOW	Analysis Method: TO-15 SIM Naphthalene	Comments e.g. Actual Preservative or specific instructions
Q1-OA-06-032015 (~~031915~~)		3/19/15	8:00	AS00100	FCA00057	~~-30.31~~ -31	~~-4.58~~	6L	X	X	
Q1-OA-10-032015 (~~031915~~)		3/20/15	(AM) ~~12:30~~ 8:35	AC01127	FCA00880	~~-30.36~~ -30	~~-4.65~~ -5	6L	X	X	
Q1-IA-36-032015 (~~031915~~)		3/20/15	8:40	AS00460	FCA00674	~~-30.54~~ -31	~~-2.50~~ -2	6L	X	X	
Q1-DUP1-032015 (~~031915~~)		3/20/15	~~8:~~ (AM) ~~12:10~~	AC02028	FCA00891	~~-30.46~~ -31	~~-3.55~~ -3	6L	X	X	
Q1-IA-37-032015 (~~031915~~)		3/20/15	8:37	AC00244	FCA00651	~~-30.28~~ -31	-0.83	6L	X	X	
Q1-IA-28-032015 (~~031915~~)		3/20/15	8:50	AC01232	FCA00401	~~-30.57~~ -31	~~-2~~ -8.60	6L	X	X	

Report Tier Levels - please select: Reporting per SOW → NJDEP requirements

Tier I - Results (Default if not specified) ____ Tier III (Results + QC & Calibration Summaries) ____

Tier II (Results + QC Summaries ____ Tier IV (Data Validation Package) 10% Surcharge ____

EDD required YES / No Type: ____ Units: ____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Grant Hurley	3/20/15	1330			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____ °C

Added Page

Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

ALS
2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) (10-Day-Standard)

ALS Project No. P1501153

ALS Contact: Kate Aguilera

Company Name & Address (Reporting Information): CH2M HILL, 18 Tremont St Suite 700, Boston MA 02108

Project Name: Quanta Resources 115 RR 2014/2015 VI

Project Number: 499159.20.24.RR

Project Manager: Kyle Block

P.O. # / Billing Information: CH2M HILL A/P, PO Box 241329, Denver CO 80224

Phone: 617-626-7013

Fax:

Email Address for Result Reporting: Kyle.Block@ch2m.com

Sampler (Print & Sign):

Analysis Method

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TO-15 list Per SOW	TO-15 SIM Naphthalene	Comments e.g. Actual Preservative or specific instructions
Q1-OA-06-031915	1	3/20/15	8:00	AS00400	FCA00057	-31	-4	6L	X	X	
Q1-OA-10-031915	2	3/20/15	(AM) 12:10 ~~8:35~~	AC01177	FCA00380	-30	-5	6L	X	X	
Q1-IA-36-031915	3	3/20/15	8:40	AS00460	FCA00674	-31	-2	6L	X	X	
Q1-Dup1-031915	4	3/20/15	8: (AM) ~~[illegible]~~	AC02028	FCA00891	-31	-3	6L	X	X	
Q1-IA-37-031915	5	3/20/15	8:37	AC00244	FCA00651	-31	0	6L	X	X	
Q1-IA-28-031915	6	3/20/15	8:50	AC01252	FCA00404	-31	-2	6L	X	X	

Report Tier Levels - please select — Reporting per SOW → NJDEP requirements
Tier I - Results (Default in not specified) ____ Tier III (Results + QC & Calibration Summaries) ____
Tier II (Results + QC Summaries ____ Tier IV (Data Validation Package) 10% Surcharge ____

EDD required YES / No
Type: ____ Units: ____

Chain of Custody Seal: (Circle) INTACT BROKEN (ABSENT)

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	3/20/15	1330	Fed Ex		
Fed Ex			[signature]	3/21/15	0930

Cooler / Blank Temperature ____ °C

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10-Day-Standard

ALS Project No P1501293

Company Name & Address (Reporting Information)
CH2M Hill
1 Tremont St. Suite 700
Boston, MA 02108

Project Name
Quanta Resources 115 RR 2014/2015 VI

Project Number
499159.20.24.RR

Project Manager
Kyle Block

P.O. # / Billing Information
CH2M Hill A/P
P.O. Box 24132
Denver, CO 80224

Phone
617-626-7013

Fax

Email Address for Result Reporting
Kyle.Block@CH2M.com

Sampler (Print & Sign)
David Reamer

ALS Contact: Kate Aguilera

Analysis Method

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TO-15 List per SOW	TO-15 SIM Naphthalene	Comments e.g. Actual Preservative or specific instructions
Q1-IA-13-032615		3/27/15	1035	A500237	~~FC0057~~ (DK) FCA00716	-30	-6	6L	X	X	

Report Tier Levels - please select
Tier I - Results (Default if not specified) ____ Tier III (Results + QC & Calibration Summaries) ____
Tier II (Results + QC Summaries ____ Tier IV (Data Validation Package) 10% Surcharge ____

Reporting per SOW & NJDEP Requirements

EDD required YES / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle)
INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	3/30/15	1400	Fed Ex		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)		
Fedex				3/31/15	1000

Cooler / Blank Temperature ____ °C

4 of 200

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10-Day-Standard

ALS Project No P1502088

Company Name & Address (Reporting Information)

Project Name Winter 2014/2015 VI Monitoring Honeywell Quanta 115 River Road

Project Number

ALS Contact: Kate Aguilera

Project Manager Kyle Block

P.O. # / Billing Information

Phone | Fax

Email Address for Result Reporting: Kyle.Block@ch2m.com

Sampler (Print & Sign): Jen Simms / Jen Simms

Analysis Method

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister -Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TO-15 List per SOW	TO-15 SIM Naphthalene	Comments e.g. Actual Preservative or specific instructions
Q1-IA-21-052015	1	05/20/15	13:35	AS00600	FCA00486	-29.78	-4.37	6L	X	X	
Q1-DUP2-052015	2	05/20/15	—	AS00877	FCA00375	-29.81	-4.65	6L	X	X	
Q1-IA-23-052015	3	05/20/15	13:23	AC01362	FCA00497	-29.78	-4.04	6L	X	X	
Q1-IA-24-052015	4	05/20/15	14:06	AS00754	FCA00700	-29.80	-14.90	6L	X	X	
Q1-DUP4-052015	5	05/20/15	—	AC00765	FCA00589	-29.70	-3.63	6L	X	X	
Q1-IA-25-052015	6	05/20/15	12:05	AS01777	FCA00834	-29.73	-4.11	6L	X	X	
Q1-CS-Q1-052015	7	05/20/15	12:45	AS00826	FCA00669	-29.81	-4.54	6L	X	X	
Q1-DUP3-052015	8	05/20/15	—	AS00091	FCA00484	-29.62	-2.60	6L	X	X	
Q1-OA-10-052015	9	05/20/15	12:20	AS00764	FCA00763	-29.81	-4.20	6L	X	X	

Report Tier Levels - please select

Tier I - Results (Default in not specified) ____ Tier III (Results + QC & Calibration Summaries) ____ Data package & reporting per SOW

Tier II (Results + QC Summaries ____ Tier IV (Date Validation Package) 10% Surcharge ____

EDD required YES / No Type: _____ Units: _____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Jen Simms	5/20/15	16:30	FedEx	5/20/15	16:20
FedEx			K. Kemp	5/21/15	0735

Cooler / Blank Temperature ____ °C

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle:
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10-Day-Standard

ALS Project No: P1500 9791

Company Name & Address (Reporting Information): CH2M HILL, 18 Tremont St, Suite 700, Boston MA 02108

Project Name: Quanta Resources 163 RR 2014/2015 VI

Project Number: 499159.HW.20.23.OR

Project Manager: Kyle Block

P.O. # / Billing Information: CH2M HILL A/P, PO Box 241329, Denver CO 80224

Phone: 617-626-7013

Fax:

Email Address for Result Reporting: Kyle.Block@ch2m.com

Sampler (Print & Sign): Jen Simms

ALS Contact: Kate Aguilera

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method: 3-in-1 per SOW	Analysis Method: TO-15 SIM Naphthalene	Comments e.g. Actual Preservative or specific instructions
Q2-IA-01-031015	1	03/10/15	14:24	AC01758	FCA00585	-30.35	-5.35	6L	X	X	
Q2-IA-02-031015	2	03/10/15	15:05	AS00601	FCA00799	-30.35	-5.24	6L	X	X	
Q2-IA-03-031015	3	03/10/15	15:01	AS00535	FCA00966	-30.32	-4.48	6L	X	X	
Q2-DUP1-031015	4	03/10/15	—	AC01322	FCA00353	-30.29	-10.99	6L	X	X	
Q2-OA-01-031015	6	03/10/15	12:47	AS00737	FCA00957	-30.32	-3.12	6L	X	X	
Q2-OA-02-031015	5	03/10/15	10:44	AC01280	FCA00801	-30.34	-3.38	6L	X	X	
Q2-VI-01-031015	7	03/10/15	09:38	SC01660	FCA00096	-30.34	-3.57	6L	X		
Q2-VI-02-031015	8	03/10/15	15:03	SSC00351	FCA00699	-30.32	-5.38	6L	X		

Report Tier Levels - please select: Reporting Per SOW NJDEP requirements

Tier I - Results (Default if not specified) _____
Tier II (Results + QC Summaries) _____
Tier III (Results + QC & Calibration Summaries) _____
Tier IV (Date Validation Package) 10% Surcharge _____

EDD required YES / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Jen Simms	03/10/15	16:50	FED EX		
FED EX	Date:	Time:	Received by: (Signature)	Date: 3/12/15	Time: 10:30

Cooler / Blank Temperature _____ °C

Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

ALS
2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) (10-Day-Standard)

ALS Project No. P1501035

ALS Contact: Kate Aguilera

Company Name & Address (Reporting Information): CH2M HILL, 18 Tremont St, Suite 700, Boston MA 02108

Project Name: Quanta Resources 103 RR 2014/2015 VI

Project Number: ~~4499-JNS~~ 499159.20.24.MA

Project Manager: Kyle Block

P.O. # / Billing Information: CH2M HILL A/P, PO Box 241329, Denver CO 80224

Phone: 617-626-7013

Fax:

Email Address for Result Reporting: Kyle.Block@ch2m.com

Sampler (Print & Sign): Jen Simms / [signature]

Analysis Method: TO-15 GSL per SOW; TO-15 SIM Naphthalene

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	TO-15 GSL per SOW	TO-15 SIM Naphthalene	Comments e.g. Actual Preservative or specific instructions
Q3-IA-01-031315	1	03/13/15	10:43	AC01896	FCA00847	-30.51	-0.39	6L	X	X	
Q3-IA-02-031315	2	03/13/15	10:38	AC02053	FCA00967	-30.50	-0.36	6L	X	X	
Q3-IA-03-031315	3	03/13/15	12:54	AC01995	FCA00887	-30.51	-3.12	6L	X	X	
Q3-IA-04-031315	4	03/13/15	12:47	AC01649	FCA00160	-30.53	-5.01	6L	X	X	
Q3-OA-01-031315	5	03/13/15	12:58	AS00845	FCA00866	-30.49	-2.19	6L	X	X	
Q3-OA-02-031315	6	03/13/15	10:45	AC01460	FCA00610	-30.47	-0.90	6L	X	X	
Q3-VI-01-031315	7	03/13/15	10:44	AS00548	FCA00818	-30.51	-1.88	6L	X		
Q3-VI-02-031315	8	03/13/15	13:29	AC01139	FCA00711	-30.45	-2.51	6L	X		
Q3-VI-03-031315	9	03/13/15	12:29	AS00080	FCA00667	-30.50	-0.22	6L	X		
Q3-DUP1-031315	10	03/13/15	—	AS00443	FCA00964	-30.52	-2.96	6L	X		

Report Tier Levels - please select: Reporting per SOW - NJDEP requirements
Tier I - Results (Default if not specified) ____ Tier III (Results + QC & Calibration Summaries) ____
Tier II (Results + QC Summaries ____ Tier IV (Date Validation Package) 10% Surcharge ____

EDD required YES / No
Type: ____ Units: ____

Chain of Custody Seal: (Circle) INTACT BROKEN (ABSENT)

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Jen Simms [signature]	03/13/15	17:40	Fed Ex		
Fed Ex			[signature]	3/16/15	10:20

Cooler / Blank Temperature ____ °C

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Attachment E
Data Quality Evaluation Reports

Honeywell Quanta Resources Superfund Site 103 River Road Vapor Intrusion Monitoring March 2015 Data Quality Evaluation Report

Introduction

The objective of this data quality evaluation (DQE) report is to assess the data quality of analytical results for vapor intrusion samples collected at the Honeywell Quanta Resources Superfund Site. Individual method requirements, guidelines from the *UFP-Quality Assurance Project Plan for Vapor Intrusion, Quanta Resources Corporation Superfund Site, OU1, Edgewater, New Jersey* (September 2013) (QAPP) and the USEPA Contract Laboratory National Functional Guidelines for Organic Data Review (June, 2008) were used in this assessment. This report is intended as a general data quality assessment designed to summarize data issues.

Analytical Data

This DQE report covers four normal indoor air samples, two normal outdoor air samples, three normal sub slab soil gas sample and one sub slab soil gas field duplicate (FD). An indoor air FD was collected at the 163 Old River Road site, please refer to that DQE for further information. A list of samples and collection dates is included in Attachment A at the end of this report. These sample results were reported under one sample delivery group, P1501035. Samples were collected March 13, 2015. The samples were analyzed for volatile organic compounds by Method TO-15SIM. The analyses were performed by ALS Environmental in Simi Valley, California. Samples were collected and shipped overnight to the laboratory.

The assessment of data included a review of: (1) the chain-of-custody (CoC) documentation; (2) holding-time compliance; (3) the required field and laboratory quality control (QC) samples; (4) flagging for method blanks; (5) laboratory control samples (LCS); (6) surrogate spike recoveries; (7) internal standard recoveries; and (8) initial and continuing calibrations.

Field samples were also reviewed to ascertain field compliance and data quality issues. This included a review of one FD set.

Data flags are assigned according to the QAPP. These flags, as well as the reason for each flag, are entered into the electronic database. Multiple flags are routinely applied to specific sample method/matrix/analyte combinations, but there will be only one final flag. A final flag is applied to the data and is the most conservative of the applied validation flags. The final flag also includes blank sample impacts.

The data flags are those listed in the QAPP and are defined below:

- J = Analyte was present but reported value may not be accurate or precise.
- R = Analyte was rejected.
- U = Analyte was analyzed for but not detected at the specified detection limit.
- UJ = Analyte was not detected above the detection limit objective. However, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Findings

The overall summaries of the data validation findings are contained in the following sections. No data required qualification due to this assessment.

Holding Times

All holding-time criteria were met.

Calibration

All initial and continuing calibration criteria were met.

Method Blanks

Method blanks were analyzed at the required frequency and were free of contamination.

Field Duplicates

One FD set was collected with this dataset. The FD and associated parent sample identifications (ID) are included below.

TABLE 1
List of Field Duplicates

Field Duplicate Sample ID	Associated Parent Sample ID
Q3-DUP1-031315	Q3-VI-03-031315

All relative percent difference criteria were met.

Internal Standards

All internal standard criteria were met.

Laboratory Control Samples

Laboratory control samples were analyzed as required and all accuracy criteria were met.

Laboratory Duplicates

A laboratory duplicate was not analyzed with this event.

Chain of Custody

Each sample was documented in a completed chain-of-custody and received at the laboratory in good condition. Canister pressures were acceptable.

Overall Assessment

The final activity in the data quality evaluation is an assessment of whether the data meets the data quality objectives (DQO). The goal of this assessment is to demonstrate that a sufficient number of representative samples were collected and the resulting analytical data can be used to support the decisionmaking process. The following summary highlights the data evaluation findings for the above defined events:

1. No data were rejected and completeness was 100 percent.
2. No data were qualified because of low-level blank contamination.
3. The precision and accuracy of the data, as measured by laboratory QC indicators, suggest that the DQOs were met.

ATTACHMENT A

Samples Associated with DQE

Field Sample ID	Sample Date	Sample Purpose
Q3-DUP1-031315	03/13/2015	FD
Q3-IA-01-031315	03/13/2015	REG
Q3-IA-02-031315	03/13/2015	REG
Q3-IA-03-031315	03/13/2015	REG
Q3-IA-04-031315	03/13/2015	REG
Q3-OA-01-031315	03/13/2015	REG
Q3-OA-02-031315	03/13/2015	REG
Q3-VI-01-031315	03/13/2015	REG
Q3-VI-02-031315	03/13/2015	REG
Q3-VI-03-031315	03/13/2015	REG

Notes:

FD = field duplicate

REG = regular sample

Honeywell Quanta Resources Superfund Site
115 River Road Vapor Intrusion Monitoring
March / May 2015
Data Quality Evaluation Report

Introduction

The objective of this data quality evaluation (DQE) report is to assess the data quality of analytical results for vapor intrusion samples collected at the Honeywell Quanta Resources Superfund Site. Individual method requirements, guidelines from the *UFP-Quality Assurance Project Plan for Vapor Intrusion, Quanta Resources Corporation Superfund Site, OU1, Edgewater, New Jersey* (September 2013) (QAPP) and the USEPA Contract Laboratory National Functional Guidelines for Organic Data Review (June, 2008) were used in this assessment. This report is intended as a general data quality assessment designed to summarize data issues.

Analytical Data

This DQE report covers 18 normal indoor air samples, 5 normal outdoor air samples, 4 normal crawl space air samples, 3 indoor air field duplicates (FD) and one crawl space air FD. A list of samples and collection dates is included in Attachment A at the end of this report. These sample results were reported under five sample delivery groups: P1500968, P1501032, P1501153, P1501293 and P1502088. Samples were collected between March 10 and May 20, 2015. The samples were analyzed for volatile organic compounds by Method TO-15 SIM. The analyses were performed by ALS Environmental in Simi Valley, California. Samples were collected and shipped overnight to the laboratory.

The assessment of data included a review of: (1) the chain-of-custody (CoC) documentation; (2) holding-time compliance; (3) the required field and laboratory quality control (QC) samples; (4) flagging for method blanks; (5) laboratory control samples (LCS); (6) surrogate spike recoveries; (7) internal standard recoveries; (8) initial and continuing calibrations; and, (9) laboratory duplicates.

Field samples were also reviewed to ascertain field compliance and data quality issues. This included a review of FDs.

Data flags are assigned according to the QAPP. These flags, as well as the reason for each flag, are entered into the electronic database. Multiple flags are routinely applied to specific sample method/matrix/analyte combinations, but there will be only one final flag. A final flag is applied to the data and is the most conservative of the applied validation flags. The final flag also includes blank sample impacts.

The data flags are those listed in the QAPP and are defined below:

- J = Analyte was present but reported value may not be accurate or precise.
- R = Analyte was rejected.
- U = Analyte was analyzed for but not detected at the specified detection limit.
- UJ = Analyte was not detected above the detection limit objective. However, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Findings

The overall summaries of the data validation findings are contained in the following sections below and summarized in Attachment B at the end of this DQE report.

Holding Times

All holding-time criteria were met.

Calibration

All initial and continuing calibration criteria were met.

Method Blanks

Method blanks were analyzed at the required frequency and were free of contamination.

Field Duplicates

Four FD sets were collected with this dataset. A list of FD and associated parent sample identifications (ID) is included below.

TABLE 1
List of Field Duplicates

Field Duplicate Sample ID	Associated Parent Sample ID
Q1-DUP1-032015	Q1-IA-36-032015
Q1-DUP2-052015	Q1-IA-21-052015
Q1-DUP3-052015	Q1-CS-01-052015
Q1-DUP4-052015	Q1-IA-24-052015

All relative percent difference (RPD) criteria were met with the following exceptions:

FD precision was not calculated for FD set Q1-IA-36-032015/ Q1-DUP1-032015 because the parent sample, Q1-IA-36-032015, was not analyzed due a leaking canister valve.

The RPDs of 1,2,4-trimethylbenzene and naphthalene were above the acceptance criterion in FD set Q1-IA-21-052015/Q1-DUP2-052015. Four associated detected results in the field duplicate set were qualified as estimated and flagged “J”.

The RPDs of 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, o-xylene and m,p-xylenes were above the acceptance criterion in FD set Q1-IA-24-052015/Q1-DUP4-052015. Eight associated detected results in the FD set were qualified as estimated and flagged “J”.

Internal Standards

All internal standard criteria were met.

Laboratory Control Samples

Laboratory control samples were analyzed as required and all accuracy criteria were met.

Laboratory Duplicates

All laboratory duplicate precision criteria were met.

Chain of Custody

Each sample was documented in a completed chain-of-custody and received at the laboratory in good condition with one exception. Sample Q1-IA-36-032015 was not analyzed due a leaking canister valve.

Overall Assessment

The final activity in the data quality evaluation is an assessment of whether the data meets the data quality objectives (DQO). The goal of this assessment is to demonstrate that a sufficient number of representative samples were collected and the resulting analytical data can be used to support the decisionmaking process. The following summary highlights the data evaluation findings for the above defined events:

1. No data were rejected and completeness was 100 percent.
2. No data were qualified because of low-level blank contamination.
3. One sample was not analyzed due to a leaking canister valve. This sample was part of a FD set so evaluation of FD precision was not possible.
4. FD RPD exceedances were observed; 12 results were qualified as estimated.
5. The precision and accuracy of the data, as measured by laboratory QC indicators, suggest that the DQOs were met.

ATTACHMENT A

Samples Associated with DQE

Field Sample ID	Sample Date	Sample Purpose
Q1-IA-03-031015	3/10/2015	REG
Q1-IA-22-031115	3/11/2015	REG
Q1-IA-39-031115	3/11/2015	REG
Q1-IA-40-031115	3/11/2015	REG
Q1-IA-42-031115	3/11/2015	REG
Q1-IA-43-031115	3/11/2015	REG
Q1-IA-44-031115	3/11/2015	REG
Q1-IA-45-031115	3/11/2015	REG
Q1-OA-03-031115	3/11/2015	REG
Q1-CS-04-031215	3/12/2015	REG
Q1-CS-05-031215	3/12/2015	REG
Q1-CS-07-031215	3/12/2015	REG
Q1-IA-32-031215	3/12/2015	REG
Q1-IA-35-031215	3/12/2015	REG
Q1-IA-41-031215	3/12/2015	REG
Q1-OA-09-031215	3/12/2015	REG
Q1-DUP1-032015	3/20/2015	FD
Q1-IA-28-032015	3/20/2015	REG
Q1-IA-37-032015	3/20/2015	REG
Q1-OA-06-032015	3/20/2015	REG
Q1-OA-10-032015	3/20/2015	REG
Q1-IA-13-032615	3/27/2015	REG
Q1-CS-01-052015	5/20/2015	REG
Q1-DUP2-052015	5/20/2015	FD
Q1-DUP3-052015	5/20/2015	FD
Q1-DUP4-052015	5/20/2015	FD
Q1-IA-21-052015	5/20/2015	REG
Q1-IA-23-052015	5/20/2015	REG
Q1-IA-24-052015	5/20/2015	REG
Q1-IA-25-052015	5/20/2015	REG
Q1-OA-10-052015	5/20/2015	REG

Notes:

FD = field duplicate

REG = regular sample

ATTACHMENT B

Validation Findings

Method	Field Sample ID	Analyte	Final Result	Lab Units	Final Flag	Reason Code
TO-15-SIM	Q1-DUP2-052015	Naphthalene	14	µg/m^3	J	FD
TO-15-SIM	Q1-IA-21-052015	Naphthalene	9.5	µg/m^3	J	FD
TO-15-SIM	Q1-DUP2-052015	1,2,4-Trimethylbenzene	1.7	µg/m^3	J	FD
TO-15-SIM	Q1-IA-21-052015	1,2,4-Trimethylbenzene	1.2	µg/m^3	J	FD
TO-15-SIM	Q1-DUP4-052015	1,3,5-Trimethylbenzene	0.84	µg/m^3	J	FD
TO-15-SIM	Q1-IA-24-052015	1,3,5-Trimethylbenzene	1.4	µg/m^3	J	FD
TO-15-SIM	Q1-DUP4-052015	o-Xylene	2.7	µg/m^3	J	FD
TO-15-SIM	Q1-IA-24-052015	o-Xylene	3.9	µg/m^3	J	FD
TO-15-SIM	Q1-DUP4-052015	1,2,4-trimethylbenzene	2.5	µg/m^3	J	FD
TO-15-SIM	Q1-IA-24-052015	1,2,4-trimethylbenzene	5.7	µg/m^3	J	FD
TO-15-SIM	Q1-DUP4-052015	Xylenes, m & p	5.1	µg/m^3	J	FD
TO-15-SIM	Q1-IA-24-052015	Xylenes, m & p	8.1	µg/m^3	J	FD

Notes:

FD = Field duplicate relative percent difference criterion exceeded.

Honeywell Quanta Resources Superfund Site 163 Old River Road Vapor Intrusion Monitoring March 2015 Data Quality Evaluation Report

Introduction

The objective of this data quality evaluation (DQE) report is to assess the data quality of analytical results for vapor intrusion samples collected at the Honeywell Quanta Resources Superfund Site. Individual method requirements, guidelines from the *UFP-Quality Assurance Project Plan for Vapor Intrusion, Quanta Resources Corporation Superfund Site, OU1, Edgewater, New Jersey* (September 2013) (QAPP) and the USEPA Contract Laboratory National Functional Guidelines for Organic Data Review (June, 2008) were used in this assessment. This report is intended as a general data quality assessment designed to summarize data issues.

Analytical Data

This DQE report covers three normal indoor air samples, two normal outdoor air samples, two normal sub slab soil gas samples and one indoor air field duplicate (FD). A sub slab soil gas FD was collected at the 103 River Road site, please refer to that DQE for further information. A list of samples and collection dates is included in Attachment A at the end of this report. These sample results were reported under one sample delivery group, P1500979. Samples were collected March 10, 2015. The samples were analyzed for volatile organic compounds by Method TO-15SIM. The analyses were performed by ALS Environmental in Simi Valley, California (ALS). Samples were collected and shipped overnight to the laboratory.

The assessment of data included a review of: (1) the chain-of-custody (CoC) documentation; (2) holding-time compliance; (3) the required field and laboratory quality control (QC) samples; (4) flagging for method blanks; (5) laboratory control samples (LCS); (6) surrogate spike recoveries; (7) internal standard recoveries; (8) initial and continuing calibrations and (9) laboratory duplicates.

Field samples were also reviewed to ascertain field compliance and data quality issues. This included a review of one FD set.

Data flags are assigned according to the QAPP. These flags, as well as the reason for each flag, are entered into the electronic database. Multiple flags are routinely applied to specific sample method/matrix/analyte combinations, but there will be only one final flag. A final flag is applied to the data and is the most conservative of the applied validation flags. The final flag also includes blank sample impacts.

The data flags are those listed in the QAPP and are defined below:

- J = Analyte was present but reported value may not be accurate or precise.
- R = Analyte was rejected.
- U = Analyte was analyzed for but not detected at the specified detection limit.
- UJ = Analyte was not detected above the detection limit objective. However, the reported detection limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Findings

The overall summaries of the data validation findings are contained in the following sections below and summarized in Attachment B at the end of this DQE report.

Holding Times

All holding-time criteria were met.

Calibration

All initial and continuing calibration criteria were met.

Method Blanks

Method blanks were analyzed at the required frequency and were free of contamination.

Field Duplicates

One FD set was collected with this dataset. The FD and associated parent sample identifications (ID) are included below.

TABLE 1
List of Field Duplicates

Field Duplicate Sample ID	Associated Parent Sample ID
Q2-DUP1-031015	Q2-IA-03-031015

All relative percent difference (RPD) criteria were met with the following exceptions:

The RPDs of 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethylbenzene, naphthalene, m,p-xylenes, and o-xylene were above the acceptance criterion in the FD set. Twelve associated detected results in the FD set were qualified as estimated and flagged as “J”.

Internal Standards

All internal standard criteria were met.

Laboratory Control Samples

Laboratory control samples were analyzed as required and all accuracy criteria were met.

Laboratory Duplicates

All laboratory duplicate precision criteria were met.

Chain of Custody

Each sample was documented in a completed chain-of-custody and received at the laboratory in good condition. Canister pressures were acceptable.

Overall Assessment

The final activity in the data quality evaluation is an assessment of whether the data meets the data quality objectives (DQO). The goal of this assessment is to demonstrate that a sufficient number of representative samples were collected and the resulting analytical data can be used to support the decisionmaking process. The following summary highlights the data evaluation findings for the above defined events:

1. No data were rejected and completeness was 100 percent.
2. No data were qualified because of low-level blank contamination.

3. FD RPD exceedances were observed; 12 results were qualified as estimated.
4. The precision and accuracy of the data, as measured by laboratory QC indicators, suggest that the DQOs were met.

ATTACHMENT A

Samples Associated with DQE

Field Sample ID	Sample Date	Sample Purpose
Q2-DUP1-031015	3/10/2015	FD
Q2-IA-01-031015	3/10/2015	REG
Q2-IA-02-031015	3/10/2015	REG
Q2-IA-03-031015	3/10/2015	REG
Q2-OA-01-031015	3/10/2015	REG
Q2-OA-02-031015	3/10/2015	REG
Q2-VI-01-031015	3/10/2015	REG
Q2-VI-02-031015	3/10/2015	REG

Notes:

FD = field duplicate

REG = regular sample

ATTACHMENT B

Validation Findings

Method	Field Sample ID	Analyte	Final Result	Lab Units	Final Flag	Reason Code
TO-15-SIM	Q2-DUP1-031015	1,2,4-Trimethylbenzene	2.7	µg/m^3	J	FD
TO-15-SIM	Q2-IA-03-031015	1,2,4-Trimethylbenzene	1.1	µg/m^3	J	FD
TO-15-SIM	Q2-DUP1-031015	1,3,5-Trimethylbenzene	0.98	µg/m^3	J	FD
TO-15-SIM	Q2-IA-03-031015	1,3,5-Trimethylbenzene	0.36	µg/m^3	J	FD
TO-15-SIM	Q2-DUP1-031015	Ethylbenzene	1.3	µg/m^3	J	FD
TO-15-SIM	Q2-IA-03-031015	Ethylbenzene	0.79	µg/m^3	J	FD
TO-15-SIM	Q2-DUP1-031015	Naphthalene	0.11	µg/m^3	J	FD
TO-15-SIM	Q2-IA-03-031015	Naphthalene	0.24	µg/m^3	J	FD
TO-15-SIM	Q2-DUP1-031015	o-Xylene	2.7	µg/m^3	J	FD
TO-15-SIM	Q2-IA-03-031015	o-Xylene	1.1	µg/m^3	J	FD
TO-15-SIM	Q2-DUP1-031015	Xylenes, m & p	5.5	µg/m^3	J	FD
TO-15-SIM	Q2-IA-03-031015	Xylenes, m & p	2.7	µg/m^3	J	FD

Notes:

FD = Field duplicate relative percent difference criterion exceeded.

Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle:
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) (10-Day-Standard)

ALS Project No: P1502088

Company Name & Address (Reporting Information):

Project Name: Winter 2014/2015 VI Monitoring Honeywell Quanta 115 River Road

Project Number:

ALS Contact: Kate Aguilera

Project Manager: Kyle Block

Phone: Fax:

P.O. # / Billing Information:

Email Address for Result Reporting: Kyle.Block@ch2m.com

Sampler (Print & Sign): Jen Simms / Jen Simms

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method: TO-15 List per SOW	Analysis Method: TO-15 SIM Naphthalene	Comments e.g. Actual Preservative or specific instructions
Q1-IA-21-052015	1	05/20/15	13:35	AS00600	FCA00486	-29.78	-4.37	6L	X	X	
Q1-DUP2-052015	2	05/20/15	—	AS00877	FCA00375	-29.81	-4.65	6L	X	X	
Q1-IA-23-052015	3	05/20/15	13:23	AC01362	FCA01497	-29.78	-4.04	6L	X	X	
Q1-IA-24-052015	4	05/20/15	14:00	AS00754	FCA00700	-29.80	-14.90	6L	X	X	
Q1-DUP4-052015	5	05/20/15	—	AC00765	FCA00589	-29.70	-2.63	6L	X	X	
Q1-IA-25-052015	6	05/20/15	12:05	AC01777	FCA00834	-29.73	-4.11	6L	X	X	
Q1-CS-Q1-052015	7	05/20/15	12:45	AS00826	FCA00669	-29.81	-4.54	6L	X	X	
Q1-DUP3-052015	8	05/20/15	—	AS00091	FCA00484	-29.62	-2.60	6L	X	X	
Q1-OA-10-052015	9	05/20/15	12:20	AS00764	FCA00763	-29.81	-4.20	6L	X	X	

Report Tier Levels - please select: Data package & reporting per SOW

Tier I = Results (Default if not specified) ____
Tier II (Results + QC Summaries) ____
Tier III (Results + QC & Calibration Summaries) ____
Tier IV (Data Validation Package) 10% Surcharge ____

EDD required: YES / NO
Type: ____ Units: ____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP):

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	5/20/15	16:30	FedEx	5/20/15	16:20
Fedex	Date:	Time:	K. Kemp	5/21/15	0935

Cooler / Blank Temperature ____ °C

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ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **CH2M Hill**
Client Sample ID: **Q1-IA-21-052015** ALS Project ID: P1502088
Client Project ID: **Winter 2014/2015 VI Monitoring Quanta-115 RR** ALS Sample ID: P1502088-001

Test Code: EPA TO-15 SIM Date Collected: 5/20/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 5/21/15
Analyst: Wida Ang Date Analyzed: 6/1/15
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00600
Initial Pressure (psig): -1.64 Final Pressure (psig): 3.56

Canister Dilution Factor: 1.40

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier	Reason code
71-43-2	Benzene	**1.6**	0.11	0.028	**0.51**	0.033	0.0088		
100-41-4	Ethylbenzene	**2.1**	0.14	0.014	**0.49**	0.032	0.0031		
179601-23-1	m,p-Xylenes	**2.6**	0.14	0.027	**0.60**	0.032	0.0061		
95-47-6	o-Xylene	**1.3**	0.14	0.012	**0.30**	0.032	0.0029		
108-67-8	1,3,5-Trimethylbenzene	**0.36**	0.14	0.010	**0.073**	0.028	0.0021		
95-63-6	1,2,4-Trimethylbenzene	**1.2**	0.14	0.012	**0.24**	0.028	0.0024	J	FD
91-20-3	Naphthalene	**9.5**	0.035	0.022	**1.8**	0.0067	0.0043	J	FD

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **CH2M Hill**
Client Sample ID: **Q1-DUP2-052015** ALS Project ID: P1502088
Client Project ID: **Winter 2014/2015 VI Monitoring Quanta-115 RR** ALS Sample ID: P1502088-002

Test Code: EPA TO-15 SIM Date Collected: 5/20/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 5/21/15
Analyst: Wida Ang Date Analyzed: 6/1/15
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00877

Initial Pressure (psig): -1.79 Final Pressure (psig): 3.56

Canister Dilution Factor: 1.41

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier	Reasm Code
71-43-2	Benzene	**1.9**	0.11	0.028	**0.60**	0.033	0.0088		
100-41-4	Ethylbenzene	**2.3**	0.14	0.014	**0.54**	0.032	0.0032		
179601-23-1	m,p-Xylenes	**3.5**	0.14	0.027	**0.82**	0.032	0.0062		
95-47-6	o-Xylene	**1.7**	0.14	0.013	**0.38**	0.032	0.0029		
108-67-8	1,3,5-Trimethylbenzene	**0.49**	0.14	0.010	**0.099**	0.029	0.0021		
95-63-6	1,2,4-Trimethylbenzene	**1.7**	0.14	0.012	**0.35**	0.029	0.0024	J	FD
91-20-3	Naphthalene	**14**	0.035	0.023	**2.7**	0.0067	0.0043	J	FD

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **CH2M Hill**
Client Sample ID: **Q1-IA-23-052015** ALS Project ID: P1502088
Client Project ID: **Winter 2014/2015 VI Monitoring Quanta-115 RR** ALS Sample ID: P1502088-003

Test Code: EPA TO-15 SIM Date Collected: 5/20/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 5/21/15
Analyst: Wida Ang Date Analyzed: 6/1/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01362

Initial Pressure (psig): -1.54 Final Pressure (psig): 3.72

Canister Dilution Factor: 1.40

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
71-43-2	Benzene	**1.4**	0.11	0.028	**0.44**	0.033	0.0088	
100-41-4	Ethylbenzene	**1.4**	0.14	0.014	**0.33**	0.032	0.0031	
179601-23-1	m,p-Xylenes	**4.7**	0.14	0.027	**1.1**	0.032	0.0061	
95-47-6	o-Xylene	**1.6**	0.14	0.012	**0.36**	0.032	0.0029	
108-67-8	1,3,5-Trimethylbenzene	**0.43**	0.14	0.010	**0.087**	0.028	0.0021	
95-63-6	1,2,4-Trimethylbenzene	**1.5**	0.14	0.012	**0.30**	0.028	0.0024	
91-20-3	Naphthalene	**2.1**	0.035	0.022	**0.40**	0.0067	0.0043	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **CH2M Hill**
Client Sample ID: **Q1-IA-24-052015** ALS Project ID: P1502088
Client Project ID: **Winter 2014/2015 VI Monitoring Quanta-115 RR** ALS Sample ID: P1502088-004

Test Code: EPA TO-15 SIM Date Collected: 5/20/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 5/21/15
Analyst: Wida Ang Date Analyzed: 6/1 - 6/2/15
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.20 Liter(s)
Container ID: AS00754

Initial Pressure (psig): -6.87 Final Pressure (psig): 3.62

Canister Dilution Factor: 2.34

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier	Reason Code
71-43-2	Benzene	**3.3**	0.18	0.047	**1.0**	0.055	0.015		
100-41-4	Ethylbenzene	**5.3**	0.23	0.023	**1.2**	0.054	0.0052		
179601-23-1	m,p-Xylenes	**8.1**	0.23	0.044	**1.9**	0.054	0.010	J	FD
95-47-6	o-Xylene	**3.9**	0.23	0.021	**0.91**	0.054	0.0048	J	FD
108-67-8	1,3,5-Trimethylbenzene	**1.4**	0.23	0.017	**0.29**	0.048	0.0035	J	FD
95-63-6	1,2,4-Trimethylbenzene	**5.7**	0.23	0.019	**1.2**	0.048	0.0040	J	FD
91-20-3	Naphthalene	**22**	0.29	0.19	**4.3**	0.056	0.036	**D**	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **CH2M Hill**
Client Sample ID: **Q1-DUP4-052015** ALS Project ID: P1502088
Client Project ID: **Winter 2014/2015 VI Monitoring Quanta-115 RR** ALS Sample ID: P1502088-005

Test Code: EPA TO-15 SIM Date Collected: 5/20/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 5/21/15
Analyst: Wida Ang Date Analyzed: 6/1 - 6/2/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.10 Liter(s)
Container ID: AC00765

Initial Pressure (psig): -1.35 Final Pressure (psig): 3.71

Canister Dilution Factor: 1.38

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier	Reason Code
71-43-2	Benzene	**3.1**	0.10	0.028	**0.97**	0.032	0.0086		
100-41-4	Ethylbenzene	**4.8**	0.14	0.013	**1.1**	0.032	0.0031		
179601-23-1	m,p-Xylenes	**5.1**	0.14	0.026	**1.2**	0.032	0.0060	J	FD
95-47-6	o-Xylene	**2.7**	0.14	0.012	**0.62**	0.032	0.0028	J	FD
108-67-8	1,3,5-Trimethylbenzene	**0.84**	0.14	0.010	**0.17**	0.028	0.0021	J	FD
95-63-6	1,2,4-Trimethylbenzene	**2.5**	0.14	0.011	**0.51**	0.028	0.0023	J	FD
91-20-3	Naphthalene	**20**	0.35	0.22	**3.8**	0.066	0.042	**D**	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **CH2M Hill**
Client Sample ID: **Q1-IA-25-052015**
Client Project ID: **Winter 2014/2015 VI Monitoring Quanta-115 RR**

ALS Project ID: P1502088
ALS Sample ID: P1502088-006

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19
Analyst: Wida Ang
Sample Type: 6.0 L Summa Canister
Test Notes:
Container ID: AC01777

Date Collected: 5/20/15
Date Received: 5/21/15
Date Analyzed: 6/1 - 6/2/15
Volume(s) Analyzed: 1.00 Liter(s)
0.10 Liter(s)

Initial Pressure (psig): -1.46 Final Pressure (psig): 3.77

Canister Dilution Factor: 1.40

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
71-43-2	Benzene	**2.3**	0.11	0.028	**0.72**	0.033	0.0088	
100-41-4	Ethylbenzene	**3.5**	0.14	0.014	**0.81**	0.032	0.0031	
179601-23-1	m,p-Xylenes	**3.8**	0.14	0.027	**0.87**	0.032	0.0061	
95-47-6	o-Xylene	**2.0**	0.14	0.012	**0.47**	0.032	0.0029	
108-67-8	1,3,5-Trimethylbenzene	**0.55**	0.14	0.010	**0.11**	0.028	0.0021	
95-63-6	1,2,4-Trimethylbenzene	**1.8**	0.14	0.012	**0.37**	0.028	0.0024	
91-20-3	Naphthalene	**18**	0.35	0.22	**3.5**	0.067	0.043	**D**

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **CH2M Hill**
Client Sample ID: **Q1-CS-01-052015** ALS Project ID: P1502088
Client Project ID: **Winter 2014/2015 VI Monitoring Quanta-115 RR** ALS Sample ID: P1502088-007

Test Code: EPA TO-15 SIM Date Collected: 5/20/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 5/21/15
Analyst: Wida Ang Date Analyzed: 6/1/15
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00826

Initial Pressure (psig): -1.76 Final Pressure (psig): 3.58

Canister Dilution Factor: 1.41

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
71-43-2	Benzene	**1.6**	0.11	0.028	**0.51**	0.033	0.0088	
100-41-4	Ethylbenzene	**1.7**	0.14	0.014	**0.40**	0.032	0.0032	
179601-23-1	m,p-Xylenes	**5.5**	0.14	0.027	**1.3**	0.032	0.0062	
95-47-6	o-Xylene	**1.9**	0.14	0.013	**0.44**	0.032	0.0029	
108-67-8	1,3,5-Trimethylbenzene	**0.42**	0.14	0.010	**0.086**	0.029	0.0021	
95-63-6	1,2,4-Trimethylbenzene	**1.6**	0.14	0.012	**0.32**	0.029	0.0024	
91-20-3	Naphthalene	**1.9**	0.035	0.023	**0.37**	0.0067	0.0043	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **CH2M Hill**
Client Sample ID: **Q1-DUP3-052015**
Client Project ID: **Winter 2014/2015 VI Monitoring Quanta-115 RR**

ALS Project ID: P1502088
ALS Sample ID: P1502088-008

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19
Analyst: Wida Ang
Sample Type: 6.0 L Silonite Canister
Test Notes:
Container ID: AS00091

Date Collected: 5/20/15
Date Received: 5/21/15
Date Analyzed: 6/1/15
Volume(s) Analyzed: 1.00 Liter(s)

Initial Pressure (psig): -0.79 Final Pressure (psig): 3.54

Canister Dilution Factor: 1.31

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
71-43-2	Benzene	**1.6**	0.098	0.026	**0.51**	0.031	0.0082	
100-41-4	Ethylbenzene	**1.8**	0.13	0.013	**0.40**	0.030	0.0029	
179601-23-1	m,p-Xylenes	**5.6**	0.13	0.025	**1.3**	0.030	0.0057	
95-47-6	o-Xylene	**1.9**	0.13	0.012	**0.44**	0.030	0.0027	
108-67-8	1,3,5-Trimethylbenzene	**0.43**	0.13	0.0096	**0.088**	0.027	0.0019	
95-63-6	1,2,4-Trimethylbenzene	**1.6**	0.13	0.011	**0.33**	0.027	0.0022	
91-20-3	Naphthalene	**2.4**	0.033	0.021	**0.46**	0.0063	0.0040	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **CH2M Hill**
Client Sample ID: **Q1-OA-10-052015** ALS Project ID: P1502088
Client Project ID: **Winter 2014/2015 VI Monitoring Quanta-115 RR** ALS Sample ID: P1502088-009

Test Code: EPA TO-15 SIM Date Collected: 5/20/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 5/21/15
Analyst: Wida Ang Date Analyzed: 6/1/15
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00764

Initial Pressure (psig): -1.40 Final Pressure (psig): 3.59

Canister Dilution Factor: 1.38

CAS #	Compound	Result µg/m³	MRL µg/m³	MDL µg/m³	Result ppbV	MRL ppbV	MDL ppbV	Data Qualifier
71-43-2	Benzene	**0.49**	0.10	0.028	**0.15**	0.032	0.0086	
100-41-4	Ethylbenzene	**0.29**	0.14	0.013	**0.067**	0.032	0.0031	
179601-23-1	m,p-Xylenes	**0.83**	0.14	0.026	**0.19**	0.032	0.0060	
95-47-6	o-Xylene	**0.33**	0.14	0.012	**0.075**	0.032	0.0028	
108-67-8	1,3,5-Trimethylbenzene	**0.099**	0.14	0.010	**0.020**	0.028	0.0021	**J**
95-63-6	1,2,4-Trimethylbenzene	**0.33**	0.14	0.011	**0.068**	0.028	0.0023	
91-20-3	Naphthalene	**0.36**	0.035	0.022	**0.070**	0.0066	0.0042	

ND = Compound was analyzed for, but not detected above the laboratory detection limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
J = The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.

Attachment F
2014/2015 Analytical Results

Attachment F-1(A)
Sample Locations - Winter 2014/2015 Vapor Intrusion Monitoring Event
115 River Road Building
Quanta Site, Edgewater, New Jersey

Indoor Air Sample Locations

Location ID	Bldg #	Floor	Sample Location Description
Q1-IA-32	2	1st	Center of main open space on table
Q1-IA-13	3	2nd	Suite 321 - open workspace on south side near center of Bldg 3
Q1-IA-35	4	1st	Conference room on side table (center of Building 4)
Q1-IA-28	6	1st	Storage room on north side near former stairway
Q1-IA-36	7	1st	Suite 701 - east side of main room next to fighting ring
Q1-IA-37	7/8	1st	West side of main room next to men's restroom
Q1-IA-21	7/8	Basement	Hallway near Bldg 7/8 Sump 2
Q1-IA-23	7/8	Basement	Far east room - middle of room near the floor drain
Q1-IA-24	7/8	Basement	Far west room - next to elevator shaft
Q1-IA-25	7/8	Basement	West side, main room near Bldg 7/8 Sump 1
Q1-IA-42	8	2nd	Suite 824 - corner of inner office near elevator
Q1-IA-43	8	3rd	Suite 830 - entrance area near elevator
Q1-IA-40	9	1st	Suite 901 - west side utility room
Q1-IA-41	9	1st	Suite 901 - east side storage room
Q1-IA-22	10	Basement	Main room - center of room
Q1-IA-03	10	Basement	Northeastern most storage room with sump
Q1-IA-44	10	1st	Suite 1001 - center of main room
Q1-IA-45	10	1st	Suite 1003 - center of reception area
Q1-IA-39	11	1st	West side of main room

Crawl Space Air Sample Locations

Location ID	Bldg #	Floor	Sample Location Description
Q1-CS-01	6	Crawl Space	Northwest side
Q1-CS-04	4	Crawl Space	South side
Q1-CS-05	3	Crawl Space	Hole in lobby tile floor, center of Bldg 3
Q1-CS-07	2	Crawl Space	South side

Outdoor Air Sample Locations

Location ID	Bldg #	Floor	Sample Location Description
Q1-OA-03	10	Fence	115 River Road south parking lot chained to fence
Q1-OA-06	1	Fence	North side of 115 River Road near Hudson River at Quanta site Fence
Q1-OA-09	1	Fence	South of 115 RR Bldg next to Hudson River
Q1-OA-10	12	Fence	Northwest corner of Building 12 at Quanta Site fence

Attachment F-1(B)
Indoor Air Analytical Data Compared to NJDEP RALs
March and May 2015
115 River Road Building
Quanta Site, Edgewater, New Jersey

		Building	**Building 2**		**Building 3**		**Building 4**		**Building 6**		**Building 7**			
		Floor	**1st Floor**		**2nd Floor**		**1st Floor**		**1st Floor**		**1st Floor**			
		Location Description	**Center of main open space**		**Center of Bldg, South Side of Office**		**Conference Room (East Side)**		**North Side Storage Room**		**Main Room - East Side**		**Main Room - West Side**	
		Location	**Q1-IA-32**		**Q1-IA-13**		**Q1-IA-35**		**Q1-IA-28**		**Q1-IA-36**		**Q1-IA-37**	
		Field Sample ID	**Q1-IA-32-031215**		**Q1-IA-13-032615**		**Q1-IA-35-031215**		**QI-IA-28-031915**		**Q1-DUP1-**		**QI-IA-37-031915**	
		Sample Date	**3/12/2015**		**3/26/2015**		**3/12/2015**		**3/19/2015**		**3/19/2015**		**3/19/2015**	
		Units	**µg/m3**		**µg/m^3**		**µg/m3**		**µg/m^3**		**µg/m^3**		**µg/m^3**	
Cas #	**Parameter Name**	**NJDEP Nonresidential RAL (µg/m^3)**												
71-43-2	Benzene	200	2.2		4.7		3.2		4.3		1.1		0.73	
100-41-4	Ethylbenzene	500	1.3		4.4		2.5		2.7		0.61		0.63	
91-20-3	Naphthalene	26	4.8		2.2		1.5		0.6		1.5		0.31	
95-63-6	1,2,4-Trimethylbenzene[1]	Not Available	0.84		4.7		2.6		2.3		0.97		27	
108-67-8	1,3,5-Trimethylbenzene[1]	Not Available	0.27		1.8		0.74		0.78		0.33		8.1	
108-38-3	o-Xylene[2]	Not Available	0.88		4.8		2.7		2.5		0.82		0.99	
NA	m&p-Xylene[2]	Not Available	1.9		15		6.7		6.2		2.0		2.4	
1330-20-7	Xylenes (total) - sum of isomers	880	2.8		20		9.4		8.7		2.8		3.4	

Notes:
0.63 Bold and shaded indicates an analyte concentration equal to or greater than the NJDEP RAL.
NJDEP RALs are from Table 2 of the NJDEP Vapor Intrusion Screening Level Tables (March 2013)
NJDEP = New Jersey Department of Environmental Protection
RAL = Rapid Action Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
2 = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

Attachment F-1(B)
Indoor Air Analytical Data Compared to NJDEP RALs
March and May 2015
115 River Road Building
Quanta Site, Edgewater, New Jersey

		Building Floor	Building 7/8												Building 8			
			Vacant Basement												2nd Floor		3rd Floor	
		Location Description	Hallway Near Sump 2				Far East Room - Next to Flr Drain		Far West Room - Next to Elevator Shaft				West Side Main Room by Sump 1		Suite 824 - Inner Office Near Elevator		Suite 830 - Entrance Area Near Elevator	
		Location	Q1-IA-21				Q1-IA-23		Q1-IA-24				Q1-IA-25		Q1-IA-42		Q1-IA-43	
		Field Sample ID	Q1-IA-21-052015		Q1-DUP2-052015		Q1-IA-23-052015		Q1-IA-24-052015		Q1-DUP4-052015		Q1-IA-25-052015		Q1-IA-42-031115		Q1-IA-43-031115	
		Sample Date	5/20/2015				5/20/2015		5/20/2015				5/20/2015		3/11/2015		3/11/2015	
		Units	µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3	
Cas #	Parameter Name	NJDEP Nonresidential RAL (µg/m^3)																
71-43-2	Benzene	200	1.6		1.9		1.4		3.3		3.1		2.3		1.6		1.9	
100-41-4	Ethylbenzene	500	2.1		2.3		1.4		5.3		4.8		3.5		1.8		2.3	
91-20-3	Naphthalene	26	9.5	J	14	J	2.1		22	D	20	D	18	D	0.90		1.8	
95-63-6	1,2,4-Trimethylbenzene[1]	Not Available	1.2	J	1.7	J	1.5		5.7	J	2.5	J	1.8		1.7		1.8	
108-67-8	1,3,5-Trimethylbenzene[1]	Not Available	0.36		0.49		0.43		1.4	J	0.84	J	0.55		0.46		0.52	
108-38-3	o-Xylene[2]	Not Available	1.3		1.7		1.6		3.9	J	2.7	J	2.0		2.3		2.3	
NA	m&p-Xylene[2]	Not Available	2.6		3.5		4.7		8.1	J	5.1	J	3.8		7.2		7.2	
1330-20-7	Xylenes (total) - sum of isomers	880	3.9		5.2		6.3		12		7.8		5.8		9.5		9.5	

Notes:
0.63 Bold and shaded indicates an analyte concentration equal to or greater than the NJDEP RAL.
NJDEP RALs are from Table 2 of the NJDEP Vapor Intrusion Screening Level Tables (March 2013)
NJDEP = New Jersey Department of Environmental Protection
RAL = Rapid Action Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
2 = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

Attachment F-1(B)
Indoor Air Analytical Data Compared to NJDEP RALs
March and May 2015
115 River Road Building
Quanta Site, Edgewater, New Jersey

		Building	Building 9			Building 10					Building 11	
		Floor	1st Floor			Vacant Basement			1st Floor		1st Floor	
		Location Description	West Side Utility Room	East Side Storage Room		Northeastern Most Storage Room		Center of Main Room	Suite 1001 - Center of Main Room	Suite 1003 - Center of Reception Area	West Side of Main Room	
		Location	Q1-IA-40	Q1-IA-41		Q1-IA-03		Q1-IA-22	Q1-IA-44	Q1-IA-45	Q1-IA-39	
		Field Sample ID	Q1-IA-40-031115	Q1-IA-41-031215		Q1-IA-03-031015		Q1-IA-22-031115	Q1-IA-44-031115	Q1-IA-45-031115	Q1-IA-39-031115	
		Sample Date	3/11/2015	3/12/2015		3/10/2015		3/11/2015	3/11/2015	3/11/2015	3/11/2015	
		Units	µg/m^3	µg/m3		µg/m^3		µg/m^3	µg/m^3	µg/m^3	µg/m^3	
Cas #	Parameter Name	NJDEP Nonresidential RAL (µg/m^3)										
71-43-2	Benzene	200	1.6	0.59		2.1		2.5	2.4	3.0	1.9	
100-41-4	Ethylbenzene	500	0.83	0.31		1.2		1.5	1.3	1.9	0.93	
91-20-3	Naphthalene	26	0.5	0.055		1.2		1.8	0.26	4.8	0.56	
95-63-6	1,2,4-Trimethylbenzene[1]	Not Available	0.93	0.21		0.82		1.3	1.1	1.6	0.86	
108-67-8	1,3,5-Trimethylbenzene[1]	Not Available	0.29	0.071	J	0.24		0.46	0.32	0.6	0.28	
108-38-3	o-Xylene[2]	Not Available	0.89	0.33		0.96		1.2	1.4	1.5	0.99	
NA	m&p-Xylene[2]	Not Available	2.2	0.82		2.2		2.7	4.4	3.0	3.4	
1330-20-7	Xylenes (total) - sum of isomers	880	3.1	1.15		3.2		3.9	5.8	4.5	4.4	

Notes:
0.63 Bold and shaded indicates an analyte concentration equal to or greater than the NJDEP RAL.
NJDEP RALs are from Table 2 of the NJDEP Vapor Intrusion Screening Level Tables (March 2013)
NJDEP = New Jersey Department of Environmental Protection
RAL = Rapid Action Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
2 = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

Attachment F-1(C)
Indoor Air Analytical Data Compared to EPA Industrial Air Risk-Based Screening Levels
March and May 2015
115 River Road Building
Quanta Site, Edgewater, New Jersey

						Building Floor		**Building 2**		**Building 3**		**Building 4**		**Building 6**		**Building 7**			
								1st Floor		**2nd Floor**		**1st Floor**		**1st Floor**		**1st Floor**			
						Location Description	**103 RR, 115 RR, and 163 ORR**	**Center of main open space**		**Center of Bldg, South Side of Office**		**Conference Room (East Side)**		**North Side Storage Room**		**Main Room - East Side**		**Main Room - West Side**	
						Location	**Range of All Data**	**Q1-IA-32**		**Q1-IA-13**		**Q1-IA-35**		**Q1-IA-28**		**Q1-IA-36**		**Q1-IA-37**	
						Field Sample ID		**Q1-IA-32-031215**		**Q1-IA-13-**		**Q1-IA-35-031215**		**QI-IA-28-031915**		**Q1-DUP1-**		**QI-IA-37-031915**	
						Sample Date	**3/10/2015 - 5/20/2015**	**3/12/2015**		**3/26/2015**		**3/12/2015**		**3/19/2015**		**3/19/2015**		**3/19/2015**	
						Units	**µg/m³**	**µg/m3**		**µg/m³**		**µg/m3**		**µg/m³**		**µg/m³**		**µg/m³**	
		Industrial IASLs		**For Reference Only**															
Cas #	**Parameter Name**	**10^{-5} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**	**10^{-6} Target Risk (µg/m³)**	**10^{-4} Target Risk (µg/m³)**														
71-43-2	Benzene	16	130	1.6	160		0.49 - 1.6	2.2		4.7		3.2		4.3		1.1		0.73	
100-41-4	Ethylbenzene	49	4,400	4.9	490		0.11 J - 0.77	1.3		4.4		2.5		2.7		0.61		0.63	
91-20-3	Naphthalene	3.6	13	0.36	36		0.032 - 1.5	**4.8**		2.2		1.5		0.60		1.5		0.31	
95-63-6	1,2,4-Trimethylbenzene	NA	31	NA	NA		0.13 - 1.2	0.84		4.7		2.6		2.3		0.97		27	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	31	NA	NA		0.034 J - 0.39	0.27		1.8		0.74		0.78		0.33		8.1	
108-38-3	o-Xylene	NA	440	NA	NA		0.13 - 1.1	0.88		4.8		2.7		2.5		0.82		0.99	
NA	m&p-Xylene[2]	Not Available					0.32 - 2.8	1.9		15		6.7		6.2		2.0		2.4	
1330-20-7	Xylenes (total) - sum of isomers	NA	440	NA	NA		0.45 - 3.9	2.8		20		9.4		8.7		2.8		3.4	

Notes:

0.63 Bold and shaded indicates the value is greater than or equal to the 10^{-5} target risk IASL or HQ=1 target risk IASL and greater than outdoor air

The IASLs are based on the EPA 2013 Regional Screening Levels (November 2013) for Industrial Air.
NA = Not applicable
IASL = Indoor Air Screening Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
ND = Not detected
[α] = The inherent spatial and temporal variability in indoor and outdoor air VOC concentrations of up to 13-times observed at the 115 River Road Building since 2006 (see Attachment G) should be considered when comparing indoor and outdoor air concentrations.
[1] = An RSL is not available for 1,3,5-trimethylbenzene; the RSL for 1,2,4-trimethylbenzene was considered an evaluation surrogate for 1,3,5-trimethylbenzene
[2] = m&p-Xylene were added to o-xylene and compared to the screening levels for total xylenes.

Attachment F-1(C)
Indoor Air Analytical Data Compared to EPA Industrial Air Risk-Based Screening Levels
March and May 2015
115 River Road Building
Quanta Site, Edgewater, New Jersey

						Building Floor		Building 7/8											
								Vacant Basement											
						Location Description	103 RR, 115 RR, and 163 ORR	Hallway Near Sump 2				Far East Room - Next to Flr Drain		Far West Room - Next to Elevator Shaft				West Side Main Room by Sump 1	
						Location	Range of All Data	Q1-IA-21				Q1-IA-23		Q1-IA-24				Q1-IA-25	
						Field Sample ID		Q1-IA-21-052015		Q1-DUP2-052015		Q1-IA-23-052015		Q1-IA-24-052015		Q1-DUP4-052015		Q1-IA-25-052015	
						Sample Date	3/10/2015 - 5/20/2015	5/20/2015				5/20/2015		5/20/2015				5/20/2015	
						Units	µg/m³	µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³	
		Industrial IASLs		For Reference Only															
Cas #	Parameter Name	10^{-5} Target Risk (µg/m³)	HQ=1 Target Risk (µg/m³)	10^{-6} Target Risk (µg/m³)	10^{-4} Target Risk (µg/m³)														
71-43-2	Benzene	16	130	1.6	160		0.49 - 1.6	1.6		1.9		1.4		3.3		3.1		2.3	
100-41-4	Ethylbenzene	49	4,400	4.9	490		0.11 J - 0.77	2.1		2.3		1.4		5.3		4.8		3.5	
91-20-3	Naphthalene	3.6	13	0.36	36		0.032 - 1.5	**9.5**	J	**14**	J	2.1		**22**	D	20	D	**18**	D
95-63-6	1,2,4-Trimethylbenzene	NA	31	NA	NA		0.13 - 1.2	1.2	J	1.7	J	1.5		5.7	J	2.5	J	1.8	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	31	NA	NA		0.034 J - 0.39	0.36		0.49		0.43		1.4	J	0.84	J	0.55	
108-38-3	o-Xylene	NA	440	NA	NA		0.13 - 1.1	1.3		1.7		1.6		3.9	J	2.7	J	2.0	
NA	m&p-Xylene[2]	Not Available					0.32 - 2.8	2.6		3.5		4.7		8.1	J	5.1	J	3.8	
1330-20-7	Xylenes (total) - sum of isomers	NA	440	NA	NA		0.45 - 3.9	3.9		5.2		6.3		12		7.8		5.8	

Notes:

0.63 Bold and shaded indicates the value is greater than or equal to the 10^{-5} target risk IASL or HQ=1 target risk IASL and greater than outdoor air

The IASLs are based on the EPA 2013 Regional Screening Levels (November 2013) for Industrial Air.
NA = Not applicable
IASL = Indoor Air Screening Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
ND = Not detected
[α] = The inherent spatial and temporal variability in indoor and outdoor air VOC concentrations of up to 13-times observed at the 115 River Road Building since 2006 (see Attachment G) should be considered when comparing indoor and outdoor air concentrations.
[1] = An RSL is not available for 1,3,5-trimethylbenzene; the RSL for 1,2,4-trimethylbenzene was considered an evaluation surrogate for 1,3,5-trimethylbenzene
[2] = m&p-Xylene were added to o-xylene and compared to the screening levels for total xylenes.

Attachment F-1(C)
Indoor Air Analytical Data Compared to EPA Industrial Air Risk-Based Screening Levels
March and May 2015
115 River Road Building
Quanta Site, Edgewater, New Jersey

						Building Floor		**Building 8**		**Building 8**		**Building 9**		**Building 9**
								2nd Floor		**3rd Floor**		**1st Floor**		**1st Floor**
						Location Description	**103 RR, 115 RR, and 163 ORR**	**Suite 824 - Inner Office Near Elevator**		**Suite 830 - Entrance Area Near Elevator**		**West Side Utility Room**		**East Side Storage Room**	
						Location	**Range of All Data**	**Q1-IA-42**		**Q1-IA-43**		**Q1-IA-40**		**Q1-IA-41**	
						Field Sample ID		**Q1-IA-42-031115**		**Q1-IA-43-031115**		**Q1-IA-40-031115**		**Q1-IA-41-031215**
						Sample Date	**3/10/2015 - 5/20/2015**	**3/11/2015**		**3/11/2015**		**3/11/2015**		**3/12/2015**	
						Units	**µg/m³**	**µg/m³**		**µg/m³**		**µg/m³**		**µg/m3**	
		Industrial IASLs		**For Reference Only**											
Cas #	**Parameter Name**	**10^{-5} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**	**10^{-6} Target Risk (µg/m³)**	**10^{-4} Target Risk (µg/m³)**										
71-43-2	Benzene	16	130	1.6	160		0.49 - 1.6	1.6		1.9		1.6		0.59	
100-41-4	Ethylbenzene	49	4,400	4.9	490		0.11 J - 0.77	1.8		2.3		0.83		0.31	
91-20-3	Naphthalene	3.6	13	0.36	36		0.032 - 1.5	0.90		1.8		0.5		0.055	
95-63-6	1,2,4-Trimethylbenzene	NA	31	NA	NA		0.13 - 1.2	1.7		1.8		0.93		0.21	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	31	NA	NA		0.034 J - 0.39	0.46		0.52		0.29		0.071	J
108-38-3	o-Xylene	NA	440	NA	NA		0.13 - 1.1	2.3		2.3		0.89		0.33	
NA	m&p-Xylene[2]	Not Available					0.32 - 2.8	7.2		7.2		2.2		0.82	
1330-20-7	Xylenes (total) - sum of isomers	NA	440	NA	NA		0.45 - 3.9	9.5		9.5		3.1		1.15	

Notes:

0.63 Bold and shaded indicates the value is greater than or equal to the 10^{-5} target risk IASL or HQ=1 target risk IASL and greater than outdoor air

The IASLs are based on the EPA 2013 Regional Screening Levels (November 2013) for Industrial Air.
NA = Not applicable
IASL = Indoor Air Screening Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
ND = Not detected
[a] = The inherent spatial and temporal variability in indoor and outdoor air VOC concentrations of up to 13-times observed at the 115 River Road Building since 2006 (see Attachment G) should be considered when comparing indoor and outdoor air concentrations.
[1] = An RSL is not available for 1,3,5-trimethylbenzene; the RSL for 1,2,4-trimethylbenzene was considered an evaluation surrogate for 1,3,5-trimethylbenzene
[2] = m&p-Xylene were added to o-xylene and compared to the screening levels for total xylenes.

Attachment F-1(C)
Indoor Air Analytical Data Compared to EPA Industrial Air Risk-Based Screening Levels
March and May 2015
115 River Road Building
Quanta Site, Edgewater, New Jersey

					Building Floor		Building 10										Building 11		
							Vacant Basement				1st Floor						1st Floor		
					Location Description	103 RR, 115 RR, and 163 ORR	Northeastern Most Storage Room		Center of Main Room		Suite 1001 - Center of Main Room		Suite 1003 - Center of Reception Area		West Side of Main Room			
					Location	Range of All Data	Q1-IA-03		Q1-IA-22		Q1-IA-44		Q1-IA-45		Q1-IA-39			
					Field Sample ID		Q1-IA-03-031015		Q1-IA-22-031115		Q1-IA-44-031115		Q1-IA-45-031115		Q1-IA-39-031115			
					Sample Date	3/10/2015 - 5/20/2015	3/10/2015		3/11/2015		3/11/2015		3/11/2015		3/11/2015			
					Units	µg/m³	µg/m³		µg/m³		µg/m³		µg/m³		µg/m³			
		Industrial IASLs		For Reference Only															
Cas #	Parameter Name	10^{-5} Target Risk (µg/m³)	HQ=1 Target Risk (µg/m³)	10^{-6} Target Risk (µg/m³)	10^{-4} Target Risk (µg/m³)														
71-43-2	Benzene	16	130	1.6	160	0.49 - 1.6	2.1		2.5		2.4		3.0		1.9				
100-41-4	Ethylbenzene	49	4,400	4.9	490	0.11 J - 0.77	1.2		1.5		1.3		1.9		0.93				
91-20-3	Naphthalene	3.6	13	0.36	36	0.032 - 1.5	1.2		1.8		0.3		**4.8**		0.56				
95-63-6	1,2,4-Trimethylbenzene	NA	31	NA	NA	0.13 - 1.2	0.82		1.3		1.1		1.6		0.86				
108-67-8	1,3,5-Trimethylbenzene[1]	NA	31	NA	NA	0.034 J - 0.39	0.24		0.46		0.32		0.60		0.28				
108-38-3	o-Xylene	NA	440	NA	NA	0.13 - 1.1	0.96		1.2		1.4		1.5		0.99				
NA	m&p-Xylene[2]	Not Available				0.32 - 2.8	2.2		2.7		4.4		3.0		3.4				
1330-20-7	Xylenes (total) - sum of isomers	NA	440	NA	NA	0.45 - 3.9	3.2		3.9		5.8		4.5		4.4				

Notes:

0.63 Bold and shaded indicates the value is greater than or equal to the 10^{-5} target risk IASL or HQ=1 target risk IASL and greater than outdoor air

The IASLs are based on the EPA 2013 Regional Screening Levels (November 2013) for Industrial Air.
NA = Not applicable
IASL = Indoor Air Screening Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
ND = Not detected
[α] = The inherent spatial and temporal variability in indoor and outdoor air VOC concentrations of up to 13-times observed at the 115 River Road Building since 2006 (see Attachment G) should be considered when comparing indoor and outdoor air concentrations.
[1] = An RSL is not available for 1,3,5-trimethylbenzene; the RSL for 1,2,4-trimethylbenzene was considered an evaluation surrogate for 1,3,5-trimethylbenzene
[2] = m&p-Xylene were added to o-xylene and compared to the screening levels for total xylenes.

Attachment F-1(D)
Indoor Air Analytical Data Compared to NJDEP Non-Residential Screening Levels
March and May 2015
115 River Road Building
Quanta Site, Edgewater, New Jersey

		Building		**Building 2**		**Building 3**		**Building 4**		**Building 6**		**Building 7**		
		Floor		**1st Floor**		**2nd Floor**		**1st Floor**		**1st Floor**		**1st Floor**		
		Location Description	**103 RR, 115 RR, and 163 ORR**	**Center of main open space**		**Center of Bldg, South Side of Office**		**Conference Room (East Side)**		**North Side Storage Room**		**Main Room - East Side**		**Main Room - West Side**
		Location	**Range of All Data**	**Q1-IA-32**		**Q1-IA-13**		**Q1-IA-35**		**Q1-IA-28**		**Q1-IA-36**		**Q1-IA-37**
		Field Sample ID		**Q1-IA-32-031215**		**Q1-IA-13-032615**		**Q1-IA-35-031215**		**QI-IA-28-031915**		**Q1-DUP1-**		**QI-IA-37-031915**
		Sample Date	**3/10/2015 - 5/20/2015**	**3/12/2015**		**3/26/2015**		**3/12/2015**		**3/19/2015**		**3/19/2015**		**3/19/2015**
		Units	**µg/m^3**	**µg/m3**		**µg/m^3**		**µg/m3**		**µg/m^3**		**µg/m^3**		**µg/m^3**
Cas #	**Parameter Name**	**NJDEP Nonresidential IASL (µg/m^3)**												
71-43-2	Benzene	2	0.49 - 1.6	**2.2**		**4.7**		**3.2**		**4.3**		1.1		0.73	
100-41-4	Ethylbenzene	5	0.11 J - 0.77	1.3		4.4		2.5		2.7		0.61		0.63	
91-20-3	Naphthalene	3	0.032 - 1.5	**4.8**		2.2		1.5		0.60		1.5		0.31	
95-63-6	1,2,4-Trimethylbenzene[1]	Not Available	0.13 - 1.2	0.84		4.7		2.6		2.3		0.97		27	
108-67-8	1,3,5-Trimethylbenzene[1]	Not Available	0.034 J - 0.39	0.27		1.8		0.74		0.78		0.33		8.1	
108-38-3	o-Xylene[2]	Not Available	0.13 - 1.1	0.88		4.8		2.7		2.5		0.82		0.99	
NA	m&p-Xylene[2]	Not Available	0.32 - 2.8	1.9		15		6.7		6.2		2.0		2.4	
1330-20-7	Xylenes (total) - sum of isomers	440	0.45 - 3.9	2.8		20		9.4		8.7		2.8		3.4	

Notes:

0.63 Bold and shaded indicates the value is greater than or equal to the NJDEP Nonresidential IASL and greater than measured outdoor air concentrations.

[a] = The inherent spatial and temporal variability in indoor and outdoor air VOC concentrations of up to 13-times observed at the 115 River Road Building since 2006 (see Attachment G) should be considered when comparing indoor and outdoor air concentrations.

NJDEP Generic IASLs are from the NJDEP Vapor Intrusion Screening Level Tables (March 2013)

NJDEP = New Jersey Department of Environmental Protection

IASL = Indoor Air Screening Level

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

B = Analyte detected in both the sample and associated method blank.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

ND = Not detected

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

Attachment F-1(D)
Indoor Air Analytical Data Compared to NJDEP Non-Residential Screening Levels
March and May 2015
115 River Road Building
Quanta Site, Edgewater, New Jersey

		Building Floor		**Building 7/8**														
				Vacant Basement														
		Location Description	**103 RR, 115 RR, and 163 ORR**	**Hallway Near Sump 2**				**Far East Room - Next to Flr Drain**		**Far West Room - Next to Elevator Shaft**				**West Side Main Room by Sump 1**			
		Location	**Range of All Data**	**Q1-IA-21**				**Q1-IA-23**		**Q1-IA-24**				**Q1-IA-25**			
		Field Sample ID		**Q1-IA-21-052015**		**Q1-DUP2-052015**		**Q1-IA-23-052015**		**Q1-IA-24-052015**		**Q1-DUP4-052015**		**Q1-IA-25-052015**			
		Sample Date	**3/10/2015 - 5/20/2015**	**5/20/2015**				**5/20/2015**		**5/20/2015**				**5/20/2015**			
		Units	**µg/m³**	**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**			
Cas #	**Parameter Name**	**NJDEP Nonresidential IASL (µg/m³)**																
71-43-2	Benzene	2	0.49 - 1.6	1.6		1.9		1.4		**3.3**		**3.1**		**2.3**			
100-41-4	Ethylbenzene	5	0.11 J - 0.77	2.1		2.3		1.4		**5.3**		4.8		3.5			
91-20-3	Naphthalene	3	0.032 - 1.5	**9.5**	J	**14**	J	2.1		**22**	D	**20**	D	**18**	D		
95-63-6	1,2,4-Trimethylbenzene[1]	Not Available	0.13 - 1.2	1.2	J	1.7	J	1.5		5.7	J	2.5	J	1.8			
108-67-8	1,3,5-Trimethylbenzene[1]	Not Available	0.034 J - 0.39	0.36		0.49		0.43		1.4	J	0.84	J	0.55			
108-38-3	o-Xylene[2]	Not Available	0.13 - 1.1	1.3		1.7		1.6		3.9	J	2.7	J	2.0			
NA	m&p-Xylene[2]	Not Available	0.32 - 2.8	2.6		3.5		4.7		8.1	J	5.1	J	3.8			
1330-20-7	Xylenes (total) - sum of isomers	440	0.45 - 3.9	3.9		5.2		6.3		12		7.8		5.8			

Notes:
0.63 Bold and shaded indicates the value is greater than or equal to the NJDEP Nonresidential IASL and greater than measured outdoor air concentrations.
[a] = The inherent spatial and temporal variability in indoor and outdoor air VOC concentrations of up to 13-times observed at the 115 River Road Building since 2006 (see Attachment G) should be considered when comparing indoor and outdoor air concentrations.
NJDEP Generic IASLs are from the NJDEP Vapor Intrusion Screening Level Tables (March 2013)
NJDEP = New Jersey Department of Environmental Protection
IASL = Indoor Air Screening Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
ND = Not detected
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

Attachment F-1(D)
Indoor Air Analytical Data Compared to NJDEP Non-Residential Screening Levels
March and May 2015
115 River Road Building
Quanta Site, Edgewater, New Jersey

	Building			**Building 8**				**Building 9**			
	Floor			**2nd Floor**		**3rd Floor**		**1st Floor**			
	Location Description		**103 RR, 115 RR, and 163 ORR**	**Suite 824 - Inner Office Near Elevator**		**Suite 830 - Entrance Area Near Elevator**		**West Side Utility Room**		**East Side Storage Room**	
	Location		**Range of All Data**	**Q1-IA-42**		**Q1-IA-43**		**Q1-IA-40**		**Q1-IA-41**	
	Field Sample ID			**Q1-IA-42-031115**		**Q1-IA-43-031115**		**Q1-IA-40-031115**		**Q1-IA-41-031215**	
	Sample Date		**3/10/2015 - 5/20/2015**	**3/11/2015**		**3/11/2015**		**3/11/2015**		**3/12/2015**	
	Units		**µg/m³**	**µg/m³**		**µg/m³**		**µg/m³**		**µg/m3**	
Cas #	**Parameter Name**	**NJDEP Nonresidential IASL (µg/m³)**									
71-43-2	Benzene	2	0.49 - 1.6	1.6		1.9		1.6		0.59	
100-41-4	Ethylbenzene	5	0.11 J - 0.77	1.8		2.3		0.83		0.31	
91-20-3	Naphthalene	3	0.032 - 1.5	0.90		1.8		0.46		0.055	
95-63-6	1,2,4-Trimethylbenzene[1]	Not Available	0.13 - 1.2	1.7		1.8		0.93		0.21	
108-67-8	1,3,5-Trimethylbenzene[1]	Not Available	0.034 J - 0.39	0.46		0.52		0.29		0.071	J
108-38-3	o-Xylene[2]	Not Available	0.13 - 1.1	2.3		2.3		0.89		0.33	
NA	m&p-Xylene[2]	Not Available	0.32 - 2.8	7.2		7.2		2.2		0.82	
1330-20-7	Xylenes (total) - sum of isomers	440	0.45 - 3.9	9.5		9.5		3.1		1.15	

Notes:
0.63 Bold and shaded indicates the value is greater than or equal to the NJDEP Nonresidential IASL and greater than measured outdoor air concentrations.
[a] = The inherent spatial and temporal variability in indoor and outdoor air VOC concentrations of up to 13-times observed at the 115 River Road Building since 2006 (see Attachment G) should be considered when comparing indoor and outdoor air concentrations.
NJDEP Generic IASLs are from the NJDEP Vapor Intrusion Screening Level Tables (March 2013)
NJDEP = New Jersey Department of Environmental Protection
IASL = Indoor Air Screening Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
ND = Not detected
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

Attachment F-1(D)
Indoor Air Analytical Data Compared to NJDEP Non-Residential Screening Levels
March and May 2015
115 River Road Building
Quanta Site, Edgewater, New Jersey

	Building			**Building 10**										**Building 11**	
	Floor			**Vacant Basement**				**1st Floor**						**1st Floor**	
	Location Description		**103 RR, 115 RR, and 163 ORR**	**Northeastern Most Storage Room**		**Center of Main Room**		**Suite 1001 - Center of Main Room**		**Suite 1003 - Center of Reception Area**				**West Side of Main Room**	
	Location		**Range of All Data**	**Q1-IA-03**		**Q1-IA-22**		**Q1-IA-44**		**Q1-IA-45**				**Q1-IA-39**	
	Field Sample ID			**Q1-IA-03-031015**		**Q1-IA-22-031115**		**Q1-IA-44-031115**		**Q1-IA-45-031115**				**Q1-IA-39-031115**	
	Sample Date		**3/10/2015 - 5/20/2015**	**3/10/2015**		**3/11/2015**		**3/11/2015**		**3/11/2015**				**3/11/2015**	
	Units		**µg/m³**	**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**				**µg/m³**	
Cas #	**Parameter Name**	**NJDEP Nonresidential IASL (µg/m³)**													
71-43-2	Benzene	2	0.49 - 1.6	**2.1**		**2.5**		**2.4**		**3.0**				1.9	
100-41-4	Ethylbenzene	5	0.11 J - 0.77	1.2		1.5		1.3		1.9				0.93	
91-20-3	Naphthalene	3	0.032 - 1.5	1.2		1.8		0.3		**4.8**				0.56	
95-63-6	1,2,4-Trimethylbenzene[1]	Not Available	0.13 - 1.2	0.82		1.3		1.1		1.6				0.86	
108-67-8	1,3,5-Trimethylbenzene[1]	Not Available	0.034 J - 0.39	0.24		0.46		0.32		0.60				0.28	
108-38-3	o-Xylene[2]	Not Available	0.13 - 1.1	0.96		1.2		1.4		1.5				0.99	
NA	m&p-Xylene[2]	Not Available	0.32 - 2.8	2.2		2.7		4.4		3.0				3.4	
1330-20-7	Xylenes (total) - sum of isomers	440	0.45 - 3.9	3.2		3.9		5.8		4.5				4.4	

Notes:
0.63 Bold and shaded indicates the value is greater than or equal to the NJDEP Nonresidential IASL and greater than measured outdoor air concentrations.
[a] = The inherent spatial and temporal variability in indoor and outdoor air VOC concentrations of up to 13-times observed at the 115 River Road Building since 2006 (see Attachment G) should be considered when comparing indoor and outdoor air concentrations.
NJDEP Generic IASLs are from the NJDEP Vapor Intrusion Screening Level Tables (March 2013)
NJDEP = New Jersey Department of Environmental Protection
IASL = Indoor Air Screening Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
ND = Not detected
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

Attachment F-1(E1)
Crawl Space Air Analytical Data Compared to EPA Industrial Air Risk-Based Screening Levels - March and May 2015
115 River Road Building
Quanta Site, Edgewater, New Jersey

						Building		**Building 6**				**Building 4**		**Building 3**		**Building 2**	
						Location	**Outdoor Air Data[a]**	**Q1-CS-01**				**Q1-CS-04**		**Q1-CS-05**		**Q1-CS-07**	
						Location Description	**103 RR, 115 RR, and 163 ORR**	**Northwest Side (through vent opening in Bldg 7/8 basement)**				**South Side (through exterior vent)**		**Center of Bldg (through hole in floor)**		**South Side (through exterior vent)**	
						Field Sample ID	**Range of All Data**	**Q1-CS-01-052015**		**Q1-DUP3-052015**		**Q1-CS-04-031215**		**Q1-CS-05-031215**		**Q1-CS-07-031215**	
						Sample Date	**3/10/2015 - 5/20/2015**	**5/20/2015**				**3/12/2015**		**3/12/2015**		**3/12/2015**	
						Units	**µg/m^3**	**µg/m^3**		**µg/m^3**		**µg/m3**		**µg/m3**		**µg/m3**	
		Industrial IASLs		**For Reference Only**													
Cas #	**Parameter Name**	**10^{-5} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**	**10^{-6} Target Risk (µg/m³)**	**10^{-4} Target Risk (µg/m³)**												
71-43-2	Benzene	16	130	1.6	160		0.49 - 1.6	1.6		1.6		3.3		3.2		0.75	
100-41-4	Ethylbenzene	49	4,400	4.9	490		0.11 J - 0.77	1.7		1.8		1.3		5.4		0.33	
91-20-3	Naphthalene	3.6	13	0.36	36		0.032 - 1.5	1.9		2.4		0.36		1.8		0.28	
95-63-6	1,2,4-Trimethylbenzene	NA	31	NA	NA		0.13 - 1.2	1.6		1.6		1.5		1.6		0.38	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	31	NA	NA		0.034 J - 0.39	0.42		0.43		0.38		0.55		0.11	J
108-38-3	o-Xylene	NA	440	NA	NA		0.13 - 1.1	1.9		1.9		1.3		1.7		0.39	
NA	m&p-Xylene[2]	Not Available					0.32 - 2.8	5.5		5.6		3.8		3.6		1.1	
1330-20-7	Xylenes (total) - sum of isomers	NA	440	NA	NA		0.45 - 3.9	7.4		7.5		5.1		5.3		1.5	

Notes:
0.63 Bold and shaded indicates the value is greater than or equal to the 10^{-5} target risk IASL or HQ=1 target risk IASL and greater than outdoor air concentrations.
The IASLs are based on the EPA 2013 Regional Screening Levels (November 2013) for Industrial Air.
NA = Not applicable
IASL = Indoor Air Screening Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
ND = Not detected
[a] = The inherent spatial and temporal variability in indoor and outdoor air VOC concentrations of up to 13-times observed at the 115 River Road Building since 2006 (see Attachment G) should be considered when comparing indoor and outdoor air concentrations.
[1] = An RSL is not available for 1,3,5-trimethylbenzene; the RSL for 1,2,4-trimethylbenzene was considered an evaluation surrogate for 1,3,5-trimethylbenzene
[2] = m&p-Xylene were added to o-xylene and compared to the screening levels for total xylenes.

Attachment F-1(E2)
Crawl Space Air Analytical Data Compared to NJDEP Non-Residential Screening Levels - March and May 2015
115 River Road Building
Quanta Site, Edgewater, New Jersey

		Building		**Building 6**				**Building 4**		**Building 3**		**Building 2**	
		Location	**Outdoor Air Data[a]**	**Q1-CS-01**				**Q1-CS-04**		**Q1-CS-05**		**Q1-CS-07**	
		Location Description	**103 RR, 115 RR, and 163 ORR**	**Northwest Side (through vent opening in Bldg 7/8 basement)**				**South Side (through exterior vent)**		**Center of Bldg (through hole in floor)**		**South Side (through exterior vent)**	
		Field Sample ID	**Range of All Data**	**Q1-CS-01-052015**		**Q1-DUP3-052015**		**Q1-CS-04-031215**		**Q1-CS-05-031215**		**Q1-CS-07-031215**	
		Sample Date	**3/10/2015 - 5/20/2015**	**5/20/2015**				**3/12/2015**		**3/12/2015**		**3/12/2015**	
		Units	**µg/m^3**	**µg/m^3**		**µg/m^3**		**µg/m3**		**µg/m3**		**µg/m3**	
Cas #	**Parameter Name**	**NJDEP Nonresidential IASL (µg/m³)**											
71-43-2	Benzene	2	0.49 - 1.6	1.6		1.6		3.3		3.2		0.75	
100-41-4	Ethylbenzene	5	0.11 J - 0.77	1.7		1.8		1.3		5.4		0.33	
91-20-3	Naphthalene	3	0.032 - 1.5	1.9		2.4		0.36		1.8		0.28	
95-63-6	1,2,4-Trimethylbenzene[1]	Not Available	0.13 - 1.2	1.6		1.6		1.5		1.6		0.38	
108-67-8	1,3,5-Trimethylbenzene[1]	Not Available	0.034 J - 0.39	0.42		0.43		0.38		0.55		0.11	J
108-38-3	o-Xylene[2]	Not Available	0.13 - 1.1	1.9		1.9		1.3		1.7		0.39	
NA	m&p-Xylene[2]	Not Available	0.32 - 2.8	5.5		5.6		3.8		3.6		1.1	
1330-20-7	Xylenes (total) - sum of isomers	440	0.45 - 3.9	7.4		7.5		5.1		5.3		1.5	

Notes:
0.63 Bold and shaded indicates the value is greater than or equal to the NJDEP Nonresidential IASL and greater than measured outdoor air concentrations.
[a] = The inherent spatial and temporal variability in indoor and outdoor air VOC concentrations of up to 13-times observed at the 115 River Road Building since 2006 (see Attachment G) should be considered when comparing indoor and outdoor air concentrations.
NJDEP Generic IASLs are from the NJDEP Vapor Intrusion Screening Level Tables (March 2013)
NJDEP = New Jersey Department of Environmental Protection
IASL = Indoor Air Screening Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
ND = Not detected
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

Attachment F-1(F)
Outdoor Air Analytical Data - March and May 2015
All Three Buildings - 115 River Road, 163 Old River Road, and 103 River Road
Quanta Site, Edgewater, New Jersey

	Building	115 River Road						163 Old River Road				103 River Road				Outdoor Air Data
	Location	Q1-OA-03		Q1-OA-09		Q1-OA-10		Q2-OA-01		Q2-OA-02		Q3-OA-01		Q3-OA-02		
	Location Description	South Parking Lot - on Fence		South of Bldg - Next to River		NW Corner of Bldg 12		South Side of 163 ORR		Northwest of 163 ORR Parking Lot		North Side of 103		SW Corner of the 103 RR Building		103 RR, 115 RR, and 163 ORR
	Field Sample ID	Q1-OA-03-121813		Q1-OA-09-031215		Q1-OA-10-052015		Q2-OA-01-		Q2-OA-02-031015		Q3-OA-01-		Q3-OA-02-031315		Range of All Data
	Sample Date	3/11/2015		3/12/2015		5/20/2015		3/10/2015		3/10/2015		3/13/2015		3/13/2015		3/10/2015 - 5/20/2015
	Units	µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3
Cas #	Parameter Name															
71-43-2	Benzene	1.4		0.82		0.49		1.5		1.6		0.60		0.54		0.49 - 1.6
100-41-4	Ethylbenzene	0.58		0.56		0.29		0.67		0.77		0.12	J	0.11	J	0.11 J - 0.77
91-20-3	Naphthalene	0.74		1.5		0.36		0.1		0.093		0.032		0.062		0.032 - 1.5
127-18-4	Tetrachloroethene	Not included in the analyte list						Not included in the analyte list				0.61		0.056		0.056 - 0.61
79-01-6	Trichloroethene							0.1		0.061		NA		NA		0.061 - 0.10
95-63-6	1,2,4-Trimethylbenzene	0.62		1.1		0.33		0.96		1.2		0.13		0.14		0.13 - 1.2
108-67-8	1,3,5-Trimethylbenzene	0.16		0.29		0.099	J	0.29		0.39		0.034	J	0.041	J	0.034 J - 0.39
108-38-3	o-Xylene	0.67		0.68		0.33		0.90		1.1		0.13		0.14		0.13 - 1.1
NA	m&p-Xylene	1.7		1.5		0.83		2.2		2.8		0.32		0.35		0.32 - 2.8
1330-20-7	Xylenes (total) - sum of isomers	2.4		2.2		1.2		3.1		3.9		0.45		0.49		0.45 - 3.9

Notes:
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

Attachment F-2(A)
Sample Locations - March and May 2015
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

Indoor Air Sample Locations

Location ID	Sample Location Description
Q2-IA-01	Kitchen - counter top
Q2-IA-02	1st floor dining room - on table near wall
Q2-IA-03	2nd floor dining room - on table in SW room

Subslab Sample Locations

Location ID	Sample Location Description
Q2-VI-01	Storage room next to stairs
Q2-VI-02	Kitchen - north side next to water service closet

Outdoor Air Sample Locations

Location ID	Sample Location Description
Q2-OA-01	South side of 163 Old River Road building - chained to fence
Q2-OA-02	Northwest of parking lot - chained to fence

Attachment F-2(B)
Indoor Air Analytical Data Compared to NJDEP RALs - March 2015
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

	Location	Q2-IA-01		Q2-IA-02		Q2-IA-03			
	Location Description	1st floor kitchen		1st floor dining room		2nd floor dining room			
	Field Sample ID	Q2-IA-01-031015		Q2-IA-02-031015		Q2-IA-03-031015		Q2-DUP1-031015	
	Sample Date	3/10/2015		3/10/2015		3/10/2015			
	Units	µg/m^3		µg/m^3		µg/m^3		µg/m^3	
Cas #	**Parameter Name**	**NJDEP Nonresidential RAL (µg/m³)**							
71-43-2	Benzene	200	1.6		1.5		1.5		1.5	
100-41-4	Ethylbenzene	500	0.92		0.66		0.79	J	1.3	J
91-20-3	Naphthalene	26	0.33		0.14		0.24	J	0.11	J
79-01-6	Trichloroethene	18	0.065		0.053		0.053		0.056	
95-63-6	1,2,4-Trimethylbenzene[1]	Not Available	1.3		0.82		1.1	J	2.7	J
108-67-8	1,3,5-Trimethylbenzene[1]	Not Available	0.40		0.24		0.36	J	0.98	J
108-38-3	o-Xylene[2]	Not Available	1.3		0.87		1.1	J	2.7	J
NA	m&p-Xylene[2]	Not Available	3.2		2.3		2.7	J	5.5	J
1330-20-7	Xylenes (total) - sum of isomers	880	4.5		3.2		3.8		8.2	

Notes:
0.63 Bold and shaded indicates an analyte concentration equal to or greater than the NJDEP RAL.
NJDEP RALs are from Table 2 of the NJDEP Vapor Intrusion Screening Level Tables (March 2013)
NJDEP = New Jersey Department of Environmental Protection
RAL = Rapid Action Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

Attachment F-2(C-1)
Indoor Air Analytical Data Compared to EPA Industrial Air Risk-Based Screening Levels - March 2015
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

						Location	Outdoor Air Data		Q2-IA-01		Q2-IA-02		Q2-IA-03			
						Location Description	103 RR, 115 RR, and 163 ORR		1st floor kitchen		1st floor dining room		2nd floor dining room			
						Field Sample ID	Range of All Data		Q2-IA-01-031015		Q2-IA-02-031015		Q2-IA-03-031015		Q2-DUP1-031015	
						Sample Date	3/10/2015 - 5/20/2015		3/10/2015		3/10/2015		3/10/2015			
						Units	µg/m³		µg/m³		µg/m³		µg/m³		µg/m³	
		Industrial IASL		For Reference Only												
Cas #	Parameter Name	10^{-5} Target Risk (µg/m³)	HQ=1 Target Risk (µg/m³)	10^{-6} Target Risk (µg/m³)	10^{-4} Target Risk (µg/m³)											
71-43-2	Benzene	16	130	1.6	160		0.49 - 1.6		1.6		1.5		1.5		1.5	
100-41-4	Ethylbenzene	49	4,400	4.9	490		0.11 J - 0.77		0.92		0.66		0.79	J	1.3	J
91-20-3	Naphthalene	3.6	13	0.36	36		0.032 - 1.5		0.33		0.14		0.24	J	0.11	J
79-01-6	Trichloroethene	Not Available					0.061 - 0.10		0.065		0.053		0.053		0.056	
95-63-6	1,2,4-Trimethylbenzene	NA	31	NA	NA		0.13 - 1.2		1.3		0.82		1.1	J	2.7	J
108-67-8	1,3,5-Trimethylbenzene[1]	NA	31	NA	NA		0.034 J - 0.39		0.40		0.24		0.36	J	0.98	J
108-38-3	o-Xylene	NA	440	NA	NA		0.13 - 1.1		1.3		0.87		1.1	J	2.7	J
NA	m&p-Xylene[2]	Not Available					0.32 - 2.8		3.2		2.3		2.7	J	5.5	J
1330-20-7	Xylenes (total) - sum of isomers	NA	440	NA	NA		0.45 - 3.9		4.5		3.2		3.8		8.2	

Notes:
0.63 Bold and shaded indicates the value is greater than or equal to the 10-5 target risk IASL or HQ=1 target risk IASL and greater than outdoor air concentrations.
The IASLs are based on the EPA 2013 Regional Screening Levels (November 2013) for Industrial Air.
NA = Not applicable
IASL = Indoor Air Screening Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
[a] = The inherent spatial and temporal variability in indoor and outdoor air VOC concentrations of 2- to 4- times observed at the 163 Old River Road Building since 2008 (see Attachment G) should be considered when comparing indoor and outdoor air concentrations.
[1] = An RSL is not available for 1,3,5-trimethylbenzene; the RSL for 1,2,4-trimethylbenzene was considered an evaluation surrogate for 1,3,5-trimethylbenzene
[2] = m&p-Xylene were added to o-xylene and compared to the screening levels for total xylenes.

Attachment F-2(C-2)
Indoor Air Analytical Data Compared to NJDEP Non-Residential Screening Levels - March 2015
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

	Location	Outdoor Air Data	Q2-IA-01		Q2-IA-02		Q2-IA-03			
	Location Description	103 RR, 115 RR, and 163 ORR	1st floor kitchen		1st floor dining room		2nd floor dining room			
	Field Sample ID	Range of All Data	Q2-IA-01-031015		Q2-IA-02-031015		Q2-IA-03-031015		Q2-DUP1-031015	
	Sample Date	3/10/2015 - 5/20/2015	3/10/2015		3/10/2015		3/10/2015			
	Units	µg/m^3	µg/m^3		µg/m^3		µg/m^3		µg/m^3	
Cas #	**Parameter Name**	**NJDEP Nonresidential IASL (µg/m³)**								
71-43-2	Benzene	2	0.49 - 1.6	1.6		1.5		1.5		1.5	
100-41-4	Ethylbenzene	5	0.11 J - 0.77	0.92		0.66		0.79	J	1.3	J
91-20-3	Naphthalene	3	0.032 - 1.5	0.33		0.14		0.24	J	0.11	J
79-01-6	Trichloroethene	3	0.061 - 0.10	0.065		0.053		0.053		0.056	
95-63-6	1,2,4-Trimethylbenzene[1]	Not Available	0.13 - 1.2	1.3		0.82		1.1	J	2.7	J
108-67-8	1,3,5-Trimethylbenzene[1]	Not Available	0.034 J - 0.39	0.40		0.24		0.36	J	0.98	J
108-38-3	o-Xylene[2]	Not Available	0.13 - 1.1	1.3		0.87		1.1	J	2.7	J
NA	m&p-Xylene[2]	Not Available	0.32 - 2.8	3.2		2.3		2.7	J	5.5	J
1330-20-7	Xylenes (total) - sum of isomers	440	0.45 - 3.9	4.5		3.2		3.8		8.2	

Notes:
0.63 Bold and shaded indicates the value is greater than or equal to the NJDEP Nonresidential IASL and greater than measured outdoor air concentrations.
[a] = The inherent spatial and temporal variability in indoor and outdoor air VOC concentrations of 2- to 4- times observed at the 163 Old River Road Building since 2008 (see Attachment G) should be considered when comparing indoor and outdoor air concentrations.
NJDEP Generic IASLs are from the NJDEP Vapor Intrusion Screening Level Tables (March 2013)
NJDEP = New Jersey Department of Environmental Protection
IASL = Indoor Air Screening Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

Attachment F-2(D-1)
Subslab Soil Gas Analytical Data Compared to EPA Industrial Risk-Based Screening Levels - March 2015
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

				Location		**Q2-VI-01**		**Q2-VI-02**	
				Location Description		**Storage room next to stairs**		**Kitchen - north side**	
				Field Sample ID		**Q2-VI-01-031015**		**Q2-VI-02-031015**	
				Sample Date		**3/10/2015**		**3/10/2015**	
				Units		**µg/m^3**		**µg/m^3**	
		Industrial SGSL		**For Reference Only**					
Cas #	**Parameter Name**	**10^{-5} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**	**10^{-6} Target Risk (µg/m³)**	**10^{-4} Target Risk (µg/m³)**				
71-43-2	Benzene	160	1,300	16	1,600	0.45		0.96	J
100-41-4	Ethylbenzene	490	44,000	49	4,900	0.73		29	
91-20-3	Naphthalene	16.0	130	3.6	360	0.63		0.67	
79-01-6	Trichloroethene	Not Available	88	30	3,000	0.044		0.35	U
95-63-6	1,2,4-Trimethylbenzene	NA	310	NA	NA	1.2		13	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	310	NA	NA	0.39		4.2	
108-38-3	o-Xylene	NA	4,400	NA	NA	1.3		82	
NA	m&p-Xylene[2]	Not Available				2.6		84	
1330-20-7	Xylenes (total) - sum of isomers	NA	4,400	NA	NA	3.9		170	

Notes:
0.63 Bold and shaded indicates the value is greater than or equal to the 10-5 target risk SGSL or HQ=1 target risk SGSL.
The SGSLs are based on the EPA 2013 Regional Screening Levels (November 2013) for Industrial Air.
The SGSLs were derived from the EPA 2013 RSLs by applying the EPA Vapor Intrusion Guidance (Nov 2002) default attenuation factor of 0.1.
SGSL = Soil Gas Screening Level
NA = Not applicable
D= The reported result is from a dilution.
J = Data below calibration curve for that constituent, quantity estimated.
[1] = An RSL is not available for 1,3,5-trimethylbenzene; the RSL for 1,2,4-trimethylbenzene was considered an evaluation surrogate for 1,3,5-trimethylbenzene.
[2] = m&p-Xylene were added to o-xylene and compared to the screening levels for total xylenes.

Attachment F-2(D-2)
Subslab Soil Gas Analytical Data Compared to NJDEP Non-Residential Screening Levels - March 2015
163 Old River Road Building
Quanta Site, Edgewater, New Jersey

	Location	Q2-VI-01		Q2-VI-02	
	Location Description	Storage room next to stairs		Kitchen - north side	
	Field Sample ID	Q2-VI-01-031015		Q2-VI-02-031015	
	Sample Date	3/10/2015		3/10/2015	
	Units	µg/m^3		µg/m^3	
Cas #	**Parameter Name**	**NJDEP Nonresidential SGSL (µg/m³)**			
71-43-2	Benzene	79	0.45	0.96	J
100-41-4	Ethylbenzene	250	0.73	29	
91-20-3	Naphthalene	26	0.63	0.67	
79-01-6	Trichloroethene	150	0.044	0.35	U
95-63-6	1,2,4-Trimethylbenzene[1]	Not Available	1.2	13	
108-67-8	1,3,5-Trimethylbenzene[1]	Not Available	0.39	4.2	
108-38-3	o-Xylene[2]	Not Available	1.3	82	
NA	m&p-Xylene[2]	Not Available	2.6	84	
1330-20-7	Xylenes (total) - sum of isomers	22,000	3.9	170	

Notes:
0.63 Bold and shaded indicates the value is greater than or equal to the NJDEP Nonresidential SGSL.
NJDEP Generic SGSLs are from Table 1 of the NJDEP Vapor Intrusion Screening Level Tables (March 2013)
NJDEP = New Jersey Department of Environmental Protection
SGSL = Soil Gas Screening Level
D= The reported result is from a dilution.
J = Data below calibration curve for that constituent, quantity estimated.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

Attachment F-2(E)
Outdoor Air Analytical Data - March and May 2015
All Three Buildings - 115 River Road, 163 Old River Road, and 103 River Road
Quanta Site, Edgewater, New Jersey

Building		115 River Road						163 Old River Road				103 River Road				Outdoor Air Data
Location		Q1-OA-03		Q1-OA-09		Q1-OA-10		Q2-OA-01		Q2-OA-02		Q3-OA-01		Q3-OA-02		
Location Description		South Parking Lot - on Fence		South of Bldg - Next to River		NW Corner of Bldg 12		South Side of 163 ORR		Northwest of 163 ORR Parking Lot		North Side of 103 RR Building		SW Corner of the 103 RR Building		103 RR, 115 RR, and 163 ORR
Field Sample ID		Q1-OA-03-121813		Q1-OA-09-031215		Q1-OA-10-052015		Q2-OA-01-031015		Q2-OA-02-031015		Q3-OA-01-031315		Q3-OA-02-031315		Range of All Data
Sample Date		3/11/2015		3/12/2015		5/20/2015		3/10/2015		3/10/2015		3/13/2015		3/13/2015		3/10/2015 - 5/20/2015
Units		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3
Cas #	Parameter Name															
71-43-2	Benzene	1.4		0.82		0.49		1.5		1.6		0.60		0.54		0.49 - 1.6
100-41-4	Ethylbenzene	0.58		0.56		0.29		0.67		0.77		0.12	J	0.11	J	0.11 J - 0.77
91-20-3	Naphthalene	0.74		1.5		0.36		0.1		0.093		0.032		0.062		0.032 - 1.5
127-18-4	Tetrachloroethene	Not included in the analyte list						Not included in the analyte list				0.61		0.056		0.056 - 0.61
79-01-6	Trichloroethene							0.1		0.061		NA		NA		0.061 - 0.10
95-63-6	1,2,4-Trimethylbenzene	0.62		1.1		0.33		0.96		1.2		0.13		0.14		0.13 - 1.2
108-67-8	1,3,5-Trimethylbenzene	0.16		0.29		0.099	J	0.29		0.39		0.034	J	0.041	J	0.034 J - 0.39
108-38-3	o-Xylene	0.67		0.68		0.33		0.9		1.1		0.13		0.14		0.13 - 1.1
NA	m&p-Xylene	1.7		1.5		0.83		2.2		2.8		0.32		0.35		0.32 - 2.8
1330-20-7	Xylenes (total) - sum of isomers	2.4		2.2		1.2		3.1		3.9		0.45		0.49		0.45 - 3.9

Notes:
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

Attachment F-2(F)
Empirical Attenuation Factors
163 Old River Road Building

		March and May 2015					December 2013					March 2013					2012				
		Highest Detection in Subslab Soil Gas		Highest Detection in Indoor Air		Empirical Attenuation Factor	Highest Detection in Subslab Soil Gas		Highest Detection in Indoor Air		Empirical Attenuation Factor	Highest Detection in Subslab Soil Gas		Highest Detection in Indoor Air		Empirical Attenuation Factor	Highest Detection in Subslab Soil Gas		Highest Detection in Indoor Air		Empirical Attenuation Factor
Cas #	**Parameter Name**	**µg/m^3**		**µg/m^3**			**µg/m^3**		**µg/m^3**			**µg/m^3**		**µg/m^3**			**µg/m^3**		**µg/m^3**		
100-41-4	Ethylbenzene	29	J	1.30		0.0448	47		0.45	J	0.0096	210		0.26	J	0.0012	280		0.47		0.0017
103-65-1	n-Propylbenzene	NA		NA		NA	NA		NA		NA	NA		NA		NA	NA		NA		NA
95-63-6	1,2,4-Trimethylbenzene	13		2.70		0.2077	260	D	0.60	J	0.0023	1,500		0.29	J	0.00019	1,800		0.38	J	0.00021
108-67-8	1,3,5-Trimethylbenzene	4.2		0.98		0.2333	59		0.80	U	NA	330		0.81	U	NA	530		0.80	U	NA
1330-20-7	Xylenes (Total) - Sum of Isomers	166		8.20		0.0494	300		2.1	J	0.0071	1,500		1.2		0.00080	2,130		1.2	J	0.00055

Notes:
NA - Not available
J = Data below calibration curve for that constituent, quantity estimated.
Consistent with the data evaluation and filtering approaches described in EPA's (2008) Vapor Intrusion Database technical support document, empirical AFs were only calculated for constituents that had relatively high subslab soil gas concentrations (e.g., greater than 100 times the reporting limit).

Attachment F-2(F)
Empirical Attenuation Factors
163 Old River Road Building

		2011					2010					2009					2008				
		Highest Detection in Subslab Soil Gas		Highest Detection in Indoor Air		Empirical Attenuation Factor	Highest Detection in Subslab Soil Gas		Highest Detection in Indoor Air		Empirical Attenuation Factor	Highest Detection in Subslab Soil Gas		Highest Detection in Indoor Air		Empirical Attenuation Factor	Highest Detection in Subslab Soil Gas		Highest Detection in Indoor Air		Empirical Attenuation Factor
Cas #	**Parameter Name**	**µg/m^3**		**µg/m^3**			**µg/m^3**		**µg/m^3**			**µg/m^3**		**µg/m^3**			**µg/m^3**		**µg/m^3**		
100-41-4	Ethylbenzene	450		0.74		0.0016	150		1.1		0.0073	180		0.42	J	0.0023	1500		0.65	J	0.0004
103-65-1	n-Propylbenzene	NA		NA		NA	71		0.35	J	0.0049	150		0.14	J	0.0009	330		0.26	J	0.0008
95-63-6	1,2,4-Trimethylbenzene	1800		1.6		0.0009	590		2.4		0.0041	690		0.58	J	0.0008	2100		1.1		0.0005
108-67-8	1,3,5-Trimethylbenzene	520		0.81		0.0016	240		1.0		0.0042	210		0.29	J	0.0014	690		0.38	J	0.0006
1330-20-7	Xylenes (Total) - Sum of Isomers	3200		1.1	J	0.0003	1030		4.4		0.0043	1410		1.81		0.0013	11600		3.47		0.0003

Notes:
NA - Not available
J = Data below calibration curve for that constituent, quantity estimated.
Consistent with the data evaluation and filtering approaches described in EPA's (2008) Vapor Intrusion Database technical support document, empirical AFs were only calculated for constituents that had relatively high subslab soil gas concentrations (e.g., greater than 100 times the reporting limit).

Attachment F-3(A)
Sample Locations - Winter 2014/2015 Vapor Intrusion Monitoring Event
103 River Road Building
Quanta Site, Edgewater, New Jersey

Indoor Air Sample Locations

Location ID	Sample Location Description
Q3-IA-01	Medical office storage room
Q3-IA-02	Dentist office hallway by exit door
Q3-IA-03	Medical office reception area
Q3-IA-04	Medical office utility room

Subslab Sample Locations

Location ID	Sample Location Description
Q3-VI-01*	Medical office storage room
Q3-VI-02*	South stairwell
Q3-VI-03*	Medical office utility room

Outdoor Air Sample Locations

Location ID	Sample Location Description
Q3-OA-01	North side of 103 River Road building
Q3-OA-02	Southwest corner of the 103 RR Building

* = These subslab probes were replaced with Vapor Pins.

Attachment F-3(B)
Indoor Air Analytical Data Compared to NJDEP RALs - March 2015
103 River Road Building
Quanta Site, Edgewater, New Jersey

	Location	Q3-IA-01		Q3-IA-02		Q3-IA-03		Q3-IA-04	
	Location Description	Medical Office Storage Room		Dentist Office Hallway		Medical Office Reception Area		Medical office utility room	
	Field Sample ID	Q3-IA-01-031315		Q3-IA-02-031315		Q3-IA-03-031315		Q3-IA-04-031315	
	Sample Date	3/13/2015		3/13/2015		3/13/2015		3/13/2015	
	Units	µg/m^3		µg/m^3		µg/m^3		µg/m^3	
Cas #	**Parameter Name**	**NJDEP Nonresidential RAL (µg/m³)**							
71-43-2	Benzene	200	0.48		0.61		1.1		0.64	
100-41-4	Ethylbenzene	500	0.17		0.22		0.25		0.14	J
91-20-3	Naphthalene	26	0.10		0.11		0.091		0.086	
127-18-4	Tetrachloroethene	360	0.39		0.52		0.41		0.093	
79-01-6	Trichloroethene	18	NA		NA		NA		NA	
95-63-6	1,2,4-Trimethylbenzene[1]	Not Available	0.30		0.23		0.55		0.18	
108-67-8	1,3,5-Trimethylbenzene[1]	Not Available	0.082	J	0.063	J	0.16		0.054	J
108-38-3	o-Xylene[2]	Not Available	0.22		0.27		0.41		0.17	
NA	m&p-Xylene[2]	Not Available	0.54		0.72		0.97		0.42	
1330-20-7	Xylenes (total) - sum of isomers	880	0.76		0.99		1.4		0.59	

Notes:
0.63 Bold and shaded indicates an analyte concentration equal to or greater than the NJDEP RAL.
NJDEP RALs are from Table 2 of the NJDEP Vapor Intrusion Screening Level Tables (March 2013)
NJDEP = New Jersey Department of Environmental Protection
RAL = Rapid Action Level
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

Attachment F-3(C-1)
Indoor Air Analytical Data Compared to EPA Industrial Air Risk-Based Screening Levels - March 2015
103 River Road Building
Quanta Site, Edgewater, New Jersey

						Location	Outdoor Air Data[a]	Q3-IA-01		Q3-IA-02		Q3-IA-03		Q3-IA-04	
						Location Description	103 RR, 115 RR, and 163 ORR	Medical Office Storage Room		Dentist Office Hallway		Medical Office Reception Area		Medical office utility room	
						Field Sample ID	Range of All Data	Q3-IA-01-031315		Q3-IA-02-031315		Q3-IA-03-031315		Q3-IA-04-031315	
						Sample Date	3/10/2015 - 5/20/2015	3/13/2015		3/13/2015		3/13/2015		3/13/2015	
						Units	µg/m^3	µg/m^3		µg/m^3		µg/m^3		µg/m^3	
		Industrial IASLs		For Reference Only											
Cas #	Parameter Name	10^{-5} Target Risk (µg/m^3)	HQ=1 Target Risk (µg/m^3)	10^{-6} Target Risk (µg/m^3)	10^{-4} Target Risk (µg/m^3)										
71-43-2	Benzene	16.0	130	1.6	160		0.49 - 1.6	0.48		0.61		1.1		0.64	
100-41-4	Ethylbenzene	49.0	4,400	4.9	490		0.11 J - 0.77	0.17		0.22		0.25		0.14	J
91-20-3	Naphthalene	3.60	13	0.36	36		0.032 - 1.5	0.10		0.11		0.091		0.086	
127-18-4	Tetrachloroethene	470	180	47	4,700		0.056 - 0.61	0.39		0.52		0.41		0.093	
79-01-6	Trichloroethene	30.0	8.8	3.0	300		0.061 - 0.10	NA		NA		NA		NA	
95-63-6	1,2,4-Trimethylbenzene	NA	31	NA	NA		0.13 - 1.2	0.30		0.23		0.55		0.18	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	31	NA	NA		0.034 J - 0.39	0.082	J	0.063	J	0.16		0.054	J
108-38-3	o-Xylene	NA	440	NA	NA		0.13 - 1.1	0.22		0.27		0.41		0.17	
NA	m&p-Xylene[2]	Not Available					0.32 - 2.8	0.54		0.72		0.97		0.42	
1330-20-7	Xylenes (total) - sum of isomers	NA	440	NA	NA		0.45 - 3.9	0.76		0.99		1.4		0.59	

Notes:

0.63 Italic indicates the value is greater than or equal to the 10^{-5} target risk IASL or HQ=1 target risk IASL, but is less than or equal to outdoor air concentrations.

0.63 Bold and italic indicates the value is greater than or equal to the 10^{-5} target risk IASL or HQ=1 target risk IASL and greater than outdoor air concentrations.

Shaded indicates the value is greater than or equal to the 10^{-5} target risk IASL and/or HQ=1 target risk IASL.

The IASLs are based on the EPA 2013 Regional Screening Levels (November 2013) for Industrial Air.
NA = Not applicable
IASL = Indoor Air Screening Level
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
[a] = The inherent spatial and temporal variability in indoor and outdoor air VOC concentrations of 2- to 4- times observed at the 103 River Road Building since 2009 (see Attachment G) should be considered when comparing indoor and outdoor air concentrations.
[1] = An RSL is not available for 1,3,5-trimethylbenzene; the RSL for 1,2,4-trimethylbenzene was considered an evaluation surrogate for 1,3,5-trimethylbenzene
[2] = m&p-Xylene were added to o-xylene and compared to the screening levels for total xylenes.

Attachment F-3(C-2)
Indoor Air Analytical Data Compared to NJDEP Non-Residential Screening Levels - March 2015
103 River Road Building
Quanta Site, Edgewater, New Jersey

		Location	Outdoor Air Data[a]	Q3-IA-01		Q3-IA-02		Q3-IA-03		Q3-IA-04	
		Location Description	103 RR, 115 RR, and 163 ORR	Medical Office Storage Room		Dentist Office Hallway		Medical Office Reception Area		Medical office utility room	
		Field Sample ID	Range of All Data	Q3-IA-01-031315		Q3-IA-02-031315		Q3-IA-03-031315		Q3-IA-04-031315	
		Sample Date	3/10/2015 - 5/20/2015	3/13/2015		3/13/2015		3/13/2015		3/13/2015	
		Units	µg/m^3	µg/m^3		µg/m^3		µg/m^3		µg/m^3	
Cas #	Parameter Name	NJDEP Nonresidential IASL (µg/m^3)									
71-43-2	Benzene	2	0.49 - 1.6	0.48		0.61		1.1		0.64	
100-41-4	Ethylbenzene	5	0.11 J - 0.77	0.17		0.22		0.25		0.14	J
91-20-3	Naphthalene	3	0.032 - 1.5	0.10		0.11		0.091		0.086	
127-18-4	Tetrachloroethene	47	0.056 - 0.61	0.39		0.52		0.41		0.093	
79-01-6	Trichloroethene	3	0.061 - 0.10	NA		NA		NA		NA	
95-63-6	1,2,4-Trimethylbenzene[1]	Not Available	0.13 - 1.2	0.30		0.23		0.55		0.18	
108-67-8	1,3,5-Trimethylbenzene[1]	Not Available	0.034 J - 0.39	0.082	J	0.063	J	0.16		0.054	J
108-38-3	o-Xylene[2]	Not Available	0.13 - 1.1	0.22		0.27		0.41		0.17	
NA	m&p-Xylene[2]	Not Available	0.32 - 2.8	0.54		0.72		0.97		0.42	
1330-20-7	Xylenes (total) - sum of isomers	440	0.45 - 3.9	0.76		0.99		1.4		0.59	

Notes:
0.63 Bold and italic indicates the value is greater than or equal to the NJDEP Nonresidential IASL, but is less than or equal to measured outdoor air concentrations.
0.63 Bold and shaded indicates the value is greater than or equal to the NJDEP Nonresidential IASL and greater than measured outdoor air concentrations.
[a] = The inherent spatial and temporal variability in indoor and outdoor air VOC concentrations of 2- to 4- times observed at the 103 River Road Building since 2009 (see Attachment G) should be considered when comparing indoor and outdoor air concentrations
NJDEP Generic IASLs are from the NJDEP Vapor Intrusion Screening Level Tables (March 2013)
NJDEP = New Jersey Department of Environmental Protection
IASL = Indoor Air Screening Level
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

Attachment F-3 (D-1)
Subslab Soil Gas Analytical Data Compared to EPA Industrial Risk-Based Screening Levels - March 2015
103 River Road Building
Quanta Site, Edgewater, New Jersey

						Location	Q3-VI-01		Q3-VI-02		Q3-VI-03			
						Location Description	Medical Office Storage Room		South Stairwell		Medical Office Utility Room			
						Field Sample ID	Q3-VI-01-031315		Q3-VI-02-031315		Q3-VI-03-031315		Q3-DUP1-031315	
						Sample Date	3/13/2015		3/13/2015		3/13/2015			
						Units	µg/m^3		µg/m^3		µg/m^3		µg/m^3	
		Industrial SGSLs		For Reference Only										
Cas #	Parameter Name	10^{-5} Target Risk (µg/m^3)	HQ=1 Target Risk (µg/m^3)	10^{-6} Target Risk (µg/m^3)	10^{-4} Target Risk (µg/m^3)									
71-43-2	Benzene	160	1,300	16	1,600		0.42		0.44		0.54		0.58	
100-41-4	Ethylbenzene	490	44,000	49	4,900		0.63		0.31		0.23		0.28	
91-20-3	Naphthalene	36	130	3.6	360		0.47		0.22		0.16		0.19	
127-18-4	Tetrachloroethene	4700	1,800	470	47,000		0.76		0.4		0.1		0.13	
79-01-6	Trichloroethene	300	88	30	3,000		NA		NA		NA		NA	
95-63-6	1,2,4-Trimethylbenzene	NA	310	NA	NA		0.8		0.41		0.4		0.48	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	310	NA	NA		0.22		0.12	J	0.12		0.13	
108-38-3	o-Xylene	NA	4,400	NA	NA		0.63		0.38		0.3		0.36	
NA	m&p-Xylene[2]	Not Available					2		0.98		0.71		0.82	
1330-20-7	Xylenes (total) - sum of isomers	NA	4,400	NA	NA		2.6		1.4		1.01		1.18	

Notes:
Shaded indicates the value is greater than or equal to the 10^{-5} target risk IASL and/or HQ=1 target risk IASL.
The SGSLs are based on the EPA 2013 Regional Screening Levels (November 2013) for Industrial Air.

The SGSLs were derived from the EPA 2013 RSLs by applying the EPA Vapor Intrusion Guidance (Nov 2002) default attenuation factor of 0.1.
SGSL = Soil Gas Screening Level
NA = Not applicable
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated
[1] = An RSL is not available for 1,3,5-trimethylbenzene; the RSL for 1,2,4-trimethylbenzene was considered an evaluation surrogate for 1,3,5-trimethylbenzene.
[2] = m&p-Xylene were added to o-xylene and compared to the screening levels for total xylenes.

Attachment F-3 (D-2)
Subslab Soil Gas Analytical Data Compared to NJDEP Non-Residential Screening Levels - March 2015
103 River Road Building
Quanta Site, Edgewater, New Jersey

	Location		Q3-VI-01		Q3-VI-02		Q3-VI-03			
	Location Description		Medical Office Storage Room		South Stairwell		Medical Office Utility Room			
	Field Sample ID		Q3-VI-01-031315		Q3-VI-02-031315		Q3-VI-03-031315		Q3-DUP1-031315	
	Sample Date		3/13/2015		3/13/2015		3/13/2015			
	Units		µg/m^3		µg/m^3		µg/m^3		µg/m^3	
Cas #	**Parameter Name**	**NJDEP Nonresidential SGSL (µg/m³)**								
71-43-2	Benzene	79	0.42		0.44		0.54		0.58	
100-41-4	Ethylbenzene	250	0.63		0.31		0.23		0.28	
91-20-3	Naphthalene	26	0.47		0.22		0.16		0.19	
127-18-4	Tetrachloroethene	2,400	0.76		0.4		0.1		0.13	
79-01-6	Trichloroethene	150	NA		NA		NA		NA	
95-63-6	1,2,4-Trimethylbenzene[1]	Not Available	0.8		0.41		0.4		0.48	
108-67-8	1,3,5-Trimethylbenzene[1]	Not Available	0.22		0.12	J	0.12		0.13	
108-38-3	o-Xylene[2]	Not Available	0.63		0.38		0.3		0.36	
NA	m&p-Xylene[2]	Not Available	2.0		0.98		0.71		0.82	
1330-20-7	Xylenes (total) - sum of isomers	22,000	2.6		1.4		1.01		1.18	

Notes:
0.63 Bold and shaded indicates the value is greater than or equal to the NJDEP Nonresidential SGSL.
NJDEP Generic SGSLs are from Table 1 of the NJDEP Vapor Intrusion Screening Level Tables (March 2013)
NJDEP = New Jersey Department of Environmental Protection
SGSL = Soil Gas Screening Level
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

Attachment F-1(F)
Outdoor Air Analytical Data - March and May 2015
All Three Buildings - 115 River Road, 163 Old River Road, and 103 River Road
Quanta Site, Edgewater, New Jersey

Building Location		115 River Road						163 Old River Road				103 River Road				Outdoor Air Data
		Q1-OA-03		Q1-OA-09		Q1-OA-10		Q2-OA-01		Q2-OA-02		Q3-OA-01		Q3-OA-02		
Location Description		South Parking Lot - on Fence		South of Bldg - Next to River		NW Corner of Bldg 12		South Side of 163 ORR		Northwest of 163 ORR Parking Lot		North Side of 103 RR Building		SW Corner of the 103 RR Building		103 RR, 115 RR, and 163 ORR
Field Sample ID		Q1-OA-03-121813		Q1-OA-09-031215		Q1-OA-10-052015		Q2-OA-01-031015		Q2-OA-02-031015		Q3-OA-01-031315		Q3-OA-02-031315		Range of All Data
Sample Date		3/11/2015		3/12/2015		5/20/2015		3/10/2015		3/10/2015		3/13/2015		3/13/2015		3/10/2015 - 5/20/2015
Units		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3
Cas #	Parameter Name															
71-43-2	Benzene	1.4		0.82		0.49		1.5		1.6		0.60		0.54		0.49 - 1.6
100-41-4	Ethylbenzene	0.58		0.56		0.29		0.67		0.77		0.12	J	0.11	J	0.11 J - 0.77
91-20-3	Naphthalene	0.74		1.5		0.36		0.10		0.093		0.032		0.062		0.032 - 1.5
127-18-4	Tetrachloroethene	Not included in the analyte list						Not included in the analyte list				0.61		0.056		0.056 - 0.61
79-01-6	Trichloroethene							0.10		0.061		NA		NA		0.061 - 0.10
95-63-6	1,2,4-Trimethylbenzene	0.62		1.1		0.33		0.96		1.2		0.13		0.14		0.13 - 1.2
108-67-8	1,3,5-Trimethylbenzene	0.16		0.29		0.099	J	0.29		0.39		0.034	J	0.041	J	0.034 J - 0.39
108-38-3	o-Xylene	0.67		0.68		0.33		0.90		1.1		0.13		0.14		0.13 - 1.1
NA	m&p-Xylene	1.7		1.5		0.83		2.2		2.8		0.32		0.35		0.32 - 2.8
1330-20-7	Xylenes (total) - sum of isomers	2.4		2.2		1.2		3.1		3.9		0.45		0.49		0.45 - 3.9

Notes:
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

Attachment G
Historical Analytical Results

103 River Road Air Data

Indoor Air Analytical Data - April 2010, March 2011, April 2012, March 2013, December 2013, and March 2015

103 River Road Building

Edgewater, New Jersey

Location						**Q3-IA-01**															
Location Description						**Medical Office Storage Room**															
Field Sample ID						**Q3-IA-01-040610[a]**		**Q3-DUP1-040610[a]**		**Q3-IA-01-030411**		**Q3-DUP1-030411**		**Q3-IA-01-040312**		**Q3-IA-01-032113**		**Q3-IA-01-121913**		**Q3-IA-01-031315**	
Sample Date						**4/6/2010**				**3/4/2011**				**4/3/2012**		**3/21/2013**		**12/19/2013**		**3/13/2015**	
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**	
		EPA Industrial IASLs																			
Cas #	**Parameter Name**	**10^{-6} Target Risk (µg/m³)**	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**	**NJDEP Nonresidential IASL (µg/m³)**																
71-43-2	Benzene	1.6	160	130	2	2.7		2.4		0.83		0.68		0.55		0.62		0.90		0.48	
100-41-4	Ethylbenzene	4.9	490	4,400	5	2.0		1.5		0.33	J	0.26	J	0.20	J	0.71	U	0.33	J	0.17	
91-20-3	Naphthalene	0.36	36	13	3	2.9	J	0.94	J	0.34	J	0.16	J	0.084		0.096		0.15	B, L	0.10	
127-18-4	Tetrachloroethene	47	4,700	180	47	1.1		1.1		0.18		0.16	J	0.16	U	0.14	U	0.18	J	0.39	
79-01-6	Trichloroethene	3.0	300	8.8	3	NA		NA		NA		NA		NA		NA		0.74	U	NA	
95-63-6	1,2,4-Trimethylbenzene[1]	NA	NA	31	Not Available	1.2	J	0.69	J	0.28	J	0.25	J	0.80	U	0.24	J	0.37	J	0.30	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.54	J	0.098	UJ	0.72	U	0.82	U	0.80	U	0.71	U	0.74	U	0.082	J
108-38-3	o-Xylene[2]	NA	NA	440	Not Available	2.3		1.7		0.27	J	0.23	J	0.22	J	0.24	J	0.40	J	0.22	
NA	m&p-Xylene[2]	Not Available			Not Available	5.2		3.9		1.0		0.81	J	0.59	J	0.58	J	0.94		0.54	
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	7.4		5.6		1.3	J	1.0	J	0.81	J	0.82	J	1.3	J	0.76	

Notes:

Shaded indicates the value is greater than or equal to one or more of the IASLs.

[a] = The indoor and outdoor air analytical data from April 2010 were concluded to be biased high based on the re-sampling conducted at 115 River Road in 2010 (CH2M HILL, 2011b). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in April 2010. The data generated by Accutest were used to make relative comparisons of indoor and outdoor air concentrations during the 2010 sampling event (CH2M HILL, 2011a); however, due to the high bias, the 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations.

* = Q3-A-03 location changed to medical office reception area

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

B = Analyte detected in both the sample and associated method blank.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

NA = Not analyzed

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

103 River Road Air Data

Indoor Air Analytical Data - April 2010, March 2011, April 2012, March 2013, December 2013, and March 2015

103 River Road Building

Edgewater, New Jersey

Location						**Q3-IA-02**												**Q3-IA-03**												**Q3-IA-04**			
Location Description						**Dentist Office Hallway**												**Medical Office Reception Area***												**Medical Office Utility Room**			
Field Sample ID						**Q3-IA-02-040610[a]**		**Q3-IA-02-030411**		**Q3-IA-02-040312**		**Q3-IA-02-032113**		**Q3-IA-02-121913**		**Q3-IA-02-031315**		**Q3-IA-03-030411**		**Q3-IA-03-041012**		**Q3-IA-03-032113**		**Q3-IA-03-121913**		**Q3-IA-03-031315**		**Q3-IA-03-040610[a]**		**Q3-IA-04-031316**	
Sample Date						**4/6/2010**		**3/4/2011**		**4/3/2012**		**3/21/2013**		**12/19/2013**		**3/13/2015**		**3/4/2011**		**4/10/2012**		**3/21/2013**		**12/19/2013**		**3/13/2015**		**4/6/2010**		**3/13/2015**	
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**	
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m³)**																												
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																													
71-43-2	Benzene	1.6	160	130	2	2.3		0.74		0.55		0.58		0.98		0.61		0.89		0.54		0.70		1.2		1.1		4.2		0.64			
100-41-4	Ethylbenzene	4.9	490	4,400	5	1.9		0.33	J	0.35	J	0.39	J	0.76		0.22		0.85		0.38	J	0.75		0.88		0.25		1.5		0.14	J		
91-20-3	Naphthalene	0.36	36	13	3	2.8		0.21		0.12		0.15		0.28	B, L	0.11		0.27		0.43		0.52		0.29	B, L	0.091		0.79		0.086			
127-18-4	Tetrachloroethene	47	4,700	180	47	1.1		0.41		0.15	U	0.16	U	0.24	J	0.52		0.29		0.17	U	0.11	J	0.23	J	0.41		0.88		0.093			
79-01-6	Trichloroethene	3.0	300	8.8	3	NA		NA		NA		NA		0.76	U	NA		NA		NA		NA		0.30	J	NA		NA		NA			
95-63-6	1,2,4-Trimethylbenzene[1]	NA	NA	31	Not Available	1.0		0.31	J	0.22	J	0.25	J	0.43	J	0.23		0.51	J	0.48	J	0.58	J	1.0		0.55		0.69		0.18			
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.098	U	0.74	U	0.73	U	0.79	U	0.76	U	0.063	J	0.82	U	0.83	U	0.70	U	0.24	J	0.16		0.098	U	0.054	J		
108-38-3	o-Xylene[2]	NA	NA	440	Not Available	2.4		0.29	J	0.33	J	0.41	J	0.66	J	0.27		0.56	J	0.35	J	0.55	J	1.1		0.41		2.5		0.17			
NA	m&p-Xylene[2]	Not Available			Not Available	5.6		0.94		1.0		1.2		1.7		0.72		2.7		1.1		3.5		3.3		0.97		4.8		0.42			
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	8.3		1.2	J	1.3	J	1.6	J	2.4	J	0.99		3.3	J	1.5	J	4.1	J	4.4		1.4		7.4		0.59			

Notes:

Shaded indicates the value is greater than or equal to one or more of the IASLs.

[a] = The indoor and outdoor air analytical data from April 2010 were concluded to be biased high based on the re-sampling conducted at 115 River Road in 2010 (CH2M HILL, 2011b). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in April 2010. The data generated by Accutest were used to make relative comparisons of indoor and outdoor air concentrations during the 2010 sampling event (CH2M HILL, 2011a); however, due to the high bias, the 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations.

* = Q3-A-03 location changed to medical office reception area

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

B = Analyte detected in both the sample and associated method blank.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

NA = Not analyzed

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

103 River Road Air Data

Subslab Soil Gas Analytical Data - March 2009, April 2010, March 2011, April 2012, March 2013, December 2013, and March 2015

103 River Road Building

Edgewater, New Jersey

						Location	Q3-VI-01																					
						Location Description	Medical Office Storage Room																					
						Field Sample ID	Q3-VI-01-031809		Q3-VI-01-040610		Q3-VI-01-030411		Q3-VI-01-040312		Q3-VI-01-121913		Q3-VI-01-031315		Q3-VI-02-031809		Q3-VI-02-040610		Q3-VI-02-030411		Q3-VI-02-040312		Q3-VI-02-121913		Q3-VI-02-031315	
						Sample Date	3/18/2009		4/6/2010		3/4/2011		4/3/2012		12/19/2013		3/13/2015		3/18/2009		4/6/2010		3/4/2011		4/3/2012		12/19/2013		3/13/2015	
						Units	µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³	
		EPA Industrial SGSLs																											
Cas #	Parameter Name	10^{-6} Target Risk (µg/m³)	10^{-4} Target Risk (µg/m³)	HQ=1 Target Risk (µg/m³)	NJDEP Nonresidential SGSL (µg/m³)																								
71-43-2	Benzene	16	1,600	1,300	79		1.0	J	0.064	U	5.6	U	0.81	U	0.64		0.42		0.77	J	0.38		6.6	U	0.71	U	0.82		0.44	
100-41-4	Ethylbenzene	49	4,900	44,000	250		1.3	J	0.087	U	5.6	U	0.41	J	0.76		0.63		1.9	J	0.087	U	6.6	U	0.27	J	0.70		0.31	
91-20-3	Naphthalene	3.6	360	130	26		120		1.7		5.6	U	0.92		0.38	J	0.47		39		0.10	U	6.6	U	0.71	U	0.62	U	0.22	
95-63-6	Tetrachloroethene	470	47,000	1,800	2,400		2.2	U	0.098	U	5.6	U	0.32	J	0.33	J	0.76		2.6		0.098	U	6.6	U	0.28	J	0.36	J	0.4	
79-01-6	Trichloroethene	30	3,000	88	150		NA		NA		NA		NA		0.67	U	NA		NA		NA		NA		NA		0.24	J	NA	
108-67-8	1,2,4-Trimethylbenzene[1]	NA	NA	310	Not Available		1.0	J	0.098	U	5.6	U	0.82		0.88		0.80		0.86	J	0.098	U	6.6	U	0.49	J	0.40	J	0.41	
127-18-4	1,3,5-Trimethylbenzene[1]	NA	NA	310	Not Available		2.2	U	0.68		5.6	U	0.29	J	0.26	J	0.22		2.1	U	1.6		6.6	U	0.71	U	0.62	U	0.12	J
NA	o-Xylene[2]	NA	NA	4,400	Not Available		1.6	J	0.087	U	5.6	U	0.35	J	0.83		0.63		1.8	J	0.087	U	3.2	U	0.28	J	0.70		0.38	
108-38-3	m&p-Xylene[2]	Not Available			Not Available		3.4	J	0.087	U	11	U	1.5	J	2.6		2.0		3.5	J	0.087	U	6.5	U	0.84	J	2.0		0.98	
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	4,400	22,000		5.0	J	0.087	U	11	U	1.9	J	3.4		2.6		5.3	J	0.087	U	6.5	U	1.1	J	2.7		1.4	

Notes:

Shaded indicates the value is greater than or equal to one or more of the SGSLs.

U = Below laboratory reporting limits

J = Data below calibration curve for that constituent, quantity estimated.

NA = Not analyzed

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

103 River Road Air Data

Subslab Soil Gas Analytical Data - March 2009, April 2010, March 2011, April 2012, March 2013, December 2013, and March 201

103 River Road Building

Edgewater, New Jersey

Location						**Q3-VI-03**																							
Location Description						**Medical Office Utility Room**																							
Field Sample ID						**Q3-VI-03-031809**		**Q3-VI-03-040610**		**Q3-VI-03-030411**		**Q3-VI-03-040312**		**Q3-DUP1-040312**		**Q3-VI-03-032113**		**Q3-DUP1-032113**		**Q3-VI-03-121913**		**Q3-DUP1-121913**		**Q3-VI-03-031315**		**Q3-DUP1-031315**	
Sample Date						**3/18/2009**		**4/6/2010**		**3/4/2011**		**4/3/2012**				**3/21/2013**				**12/19/2013**				**3/13/2015**			
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**				**µg/m³**				**µg/m³**				**µg/m³**			
Cas #	**Parameter Name**	**EPA Industrial SGSLs**			**NJDEP Nonresidential SGSL (µg/m³)**																								
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																									
71-43-2	Benzene	16	1,600	1,300	79	0.98	J	0.1	U	3.2	U	0.76	U	0.76	U	0.15	J	0.12	J	0.49		0.39		0.54		0.58			
100-41-4	Ethylbenzene	49	4,900	44,000	250	1.7	J	0.087	U	3.2	U	0.76	U	0.76	U	0.90	U	0.69	U	0.50	J	0.59	J	0.23		0.28			
91-20-3	Naphthalene	3.6	360	130	26	92		0.94		3.2	U	0.76	U	0.76	U	0.90	U	0.69	U	0.69	U	0.42	J	0.16		0.19			
95-63-6	Tetrachloroethene	470	47,000	1,800	2,400	2.7		0.098	U	3.2	U	0.25	J	0.76	U	0.18	U	0.14	J	0.39	J	0.87		0.1		0.13			
79-01-6	Trichloroethene	30	3,000	88	150	NA		NA		NA		NA		NA		NA		NA		0.26	J	0.25	J	NA		NA			
108-67-8	1,2,4-Trimethylbenzene[1]	NA	NA	310	Not Available	0.88	J	0.098	U	3.2	U	0.76	U	0.45	J	0.90	U	1.0		0.56	J	0.65	J	0.4		0.48			
127-18-4	1,3,5-Trimethylbenzene[1]	NA	NA	310	Not Available	2.1	U	0.81		3.2	U	0.76	U	0.76	U	0.90	U	0.69	U	0.69	U	0.22	J	0.12		0.13			
NA	o-Xylene[2]	NA	NA	4,400	Not Available	1.7	J	0.087	U	3.2	U	0.76	U	0.23	J	0.90	U	0.69	U	0.56	J	0.81		0.3		0.36			
108-38-3	m&p-Xylene[2]	Not Available			Not Available	3.3	J	0.087	U	6.4	U	0.65	J	0.88	J	0.75	J	0.75		1.8		2.4		0.71		0.82			
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	4,400	22,000	5.0	J	0.087	U	6.4	U	0.65	J	1.1	J	0.75	J	0.75		2.4	J	3.2		1.01		1.2			

Notes:

Shaded indicates the value is greater than or equal to one or more of the SGSLs.

U = Below laboratory reporting limits

J = Data below calibration curve for that constituent, quantity estimated.

NA = Not analyzed

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

103 River Road Air Data

Outdoor Air Analytical Data - March 2009, April 2010, March 2011, April 2012, March 2013, December 2013, and March 201!

103 River Road Building

Edgewater, New Jersey

Location		Q3-OA-01												Q3-OA-02									
Location Description		North side of the 103 RR Building - Chained to Fence												Southwest of the 103 RR Building - chained to parking lot light[b]									
Field Sample ID		Q3-OA-01-031809		Q3-OA-01-040610[a]		Q3-OA-01-030511		Q3-OA-01-040312		Q3-OA-01-032113		Q3-OA-01-121913		Q3-OA-01-031315		Q3-OA-01-030411		Q3-OA-02-040312		Q3-OA-02-032113		Q3-OA-02-121913		Q3-OA-02-031315	
Sample Date		3/18/2009		4/6/2010		3/5/2011		4/3/2012		3/21/2013		12/19/2013		3/13/2015		3/4/2011		4/3/2012		3/21/2013		12/19/2013		3/13/2015	
Units		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³	
Cas #	Parameter Name																								
71-43-2	Benzene	1.3		2.4		0.66		0.49		0.52		1.0		0.60		0.72		0.51		0.59		1.1		0.54	
100-41-4	Ethylbenzene	0.52	J	1.6		0.67	U	0.78	U	0.71	U	0.35	J	0.12	J	0.17	J	0.72	U	0.74	U	0.37	J	0.11	J
91-20-3	Naphthalene	0.35		4.6		0.096		0.040		0.055		0.12	B, L	0.032		0.015	J	0.052		0.051		0.045	L, U	0.062	
127-18-4	Tetrachloroethene	0.59		0.81		0.16		0.78	U	0.71	U	0.21	J	0.61		0.69	U	0.72	U	0.74	U	0.22	J	0.056	
79-01-6	Trichloroethene	NA		NA		NA		NA		NA		0.67	U	NA		NA		NA		NA		0.90	U	NA	
95-63-6	1,2,4-Trimethylbenzene	0.59	J	1.1		0.67	U	0.16	U	0.14	U	0.45	J	0.13		0.15		0.14	U	0.15	U	0.90	U	0.14	
108-67-8	1,3,5-Trimethylbenzene	0.21	J	0.098	U	0.67	U	0.24	J	0.71	U	0.67	U	0.034	J	0.69	U	0.72	U	0.74	U	0.90	U	0.041	J
108-38-3	o-Xylene	0.6	J	2.3		0.67	U	0.78	U	0.71	U	0.51	J	0.13		0.69	U	0.72	U	0.74	U	0.45	J	0.14	
NA	m&p-Xylene	1.6		5.6		0.39	J	0.54	J	0.42	J	1.1		0.32		0.48	J	0.49	J	0.45	J	1.0		0.35	
1330-20-7	Xylenes (total) - sum of isomers	2.2	J	7.8		0.39	J	0.54	J	0.42	J	1.6	J	0.45		0.48	J	0.49	J	0.45	J	1.5	J	0.49	

Notes:

[a] = The indoor and outdoor air analytical data from April 2010 were concluded to be biased high based on the re-sampling conducted at 115 River Road in 2010 (CH2M HILL, 2011b). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in April 2010. The data generated by Accutest were used to make relative comparisons of indoor and outdoor air concentrations during the 2010 sampling event (CH2M HILL, 2011a); however, due to the high bias, the 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations.

[b] = Q3-OA-02 was first sampled in March 2011. The original location was chained to a bench. In 2012, the bench was no longer there and the sample was chained to the parking lot light.

U = Below laboratory reporting limits

J = Data below calibration curve for that constituent, quantity estimated.

B = Analyte detected in both the sample and associated method blank.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

115 River Road Indoor Air Data
Buildings 2 and 3 Indoor Air Analytical Data - March 2006, July 2006, May 2010, March 2011, March 2012, March 2013, December 2013, and March 2015
115 River Road Building
Edgewater, New Jersey

						Building	**Building 2**												
						Location	**Q1-IA-32**											**Q1-IA-33**	
						Location Description	**Bldg 2 1st Floor Main Open Space**											**Bldg 2 West Office on Desk**	
						Field Sample ID	**Q1-IA-32-033111**		**Q1-IA-32-032312**		**Q1-IA-32-032013**		**Q1-IA-32-121913**		**Q1-IA-32-031215**			**Q1-IA-33-033111**	
						Sample Date	**3/31/2011**		**3/23/2012**		**3/20/2013**		**12/19/2013**		**3/12/2015**			**3/31/2011**	
						Units	**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m3**			**µg/m³**	
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m³)**														
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**															
71-43-2	Benzene	1.6	160	130	2	0.83		1.3		0.69		1.1		2.2			0.82		
100-41-4	Ethylbenzene	4.9	490	4,400	5	0.52	J	1.2		0.37	J	0.65	J	1.3			0.52	J	
91-20-3	Naphthalene	0.36	36	13	3	4.3		1.6		1.4		2.9	L	4.8			3.6		
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	0.39	J	4.9		0.32	J	0.69	J	0.84			0.45	J	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.73	U	1.5		0.71	U	0.85	U	0.27			0.71	U	
108-38-3	o-Xylene	NA	NA	440	Not Available	0.37	J	1.0		0.29	J	0.69	J	0.88			0.37	J	
NA	m&p-Xylene[2]	Not Available			Not Available	0.86		2.6		0.72		1.5		1.9			0.92		
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	1.2	J	3.6		1.0	J	2.2	J	2.8			1.3	J	

Notes:
Shaded indicates the value is greater than or equal to one or more of the IASLs.
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

115 River Road Indoor Air Data
Buildings 2 and 3 Indoor Air Analytical Data - March 2006, July 2006, May 2010, March 2011, March 2012, March 2013, December 2013, and March 2015
115 River Road Building
Edgewater, New Jersey

Building						**Building 3**								**Building 3**									
Location						**Q1-IA-13**								**Q1-IA-14**									
Location Description						**Bldg 3 2nd Floor, Desk Area**								**Bldg 3 - 1st floor, Lawyers office library**								**Lawyer's Office - Open Space**	
Field Sample ID						**Q1-IA-13-031906**		**Q1-IA-13-073006**		**Q1-IA-13-122013**		**Q1-IA-13-032615**		**Q1-IA-14-031906**		**Q1-IA-20-031906 (duplicate of #14)**		**Q1-IA-14-073006**		**Q1-IA-20-073006**		**Q1-IA-14-033111**	
Sample Date						**3/19/2006**		**7/30/2006**		**12/20/2013**		**3/26/2015**		**3/19/2006**				**7/30/2006**		**7/30/2006**		**3/31/2011**	
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**	
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m³)**																		
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																			
71-43-2	Benzene	1.6	160	130	2	0.66		0.59		2.6		4.7		0.61		0.62		0.63		0.69		0.85	
100-41-4	Ethylbenzene	4.9	490	4,400	5	3.8		3.6		2.4		4.4		0.37		0.40		1.2		1.3		0.96	
91-20-3	Naphthalene	0.36	36	13	3	0.71		1.5		1.6	L	2.2		1.0		0.88		3.1		2.8		2.8	
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	0.63		1.4		1.4		4.7		0.32		0.37		1.0		1.0		0.86	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.17		0.43		0.44	J	1.8		0.11	J	0.12	J	0.31		0.30		0.28	J
108-38-3	o-Xylene	NA	NA	440	Not Available	2.7		2.6		2.1		4.8		0.37		0.42		0.97		1.0		0.67	J
NA	m&p-Xylene[2]	Not Available			Not Available	13		12		6.9		15		1.1		1.3		3.7		3.9		2.5	
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	16		15		9		20		1.5		1.7		4.7		4.9		3.2	J

Notes:
Shaded indicates the value is greater than or equal to one or more of the IASLs.
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

115 River Road Indoor Air Data
Buildings 2 and 3 Indoor Air Analytical Data - March 2006, July 2006, May 2010, March 2011, March 2012, March 2013, December 2013, and March 2015
115 River Road Building
Edgewater, New Jersey

Building						**Building 3**															
Location						**Q1-IA-29**				**Q1-IA-30**										**Q1-IA-31**	
Location Description						**Bldg 3 - 1st Floor Hallway - West Side**		**Bldg 3 - Room 304 (West Side)**		**Bldg 3 - 1st Floor Hallway Center**		**Room 302 (Center)**				**1st Floor, Center of Bldg, South Office**		**Bldg 3 - 1st Floor Hallway - East Side (outside of lawyer's office)**			
Field Sample ID						**Q1-IA-29-052210**		**Q1-IA-29-033111**		**Q1-IA-30-052210**		**Q1-IA-30-033111**		**Q1-IA-30-032312**		**Q1-IA-30-032013**		**Q1-IA-31-052210**			
Sample Date						**5/22/2010**		**3/31/2011**		**5/22/2010**		**3/31/2011**		**3/23/2012**		**3/20/2013**		**5/22/2010**			
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**			
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m³)**																
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																	
71-43-2	Benzene	1.6	160	130	2	0.62		0.66		0.78		0.76		1.1		0.68		0.78			
100-41-4	Ethylbenzene	4.9	490	4,400	5	0.67	J	0.46	J	0.92		0.99		1.1		0.33	J	1.2			
91-20-3	Naphthalene	0.36	36	13	3	1.0		3.1		1.1		3.0		1.6		1.7		1.0			
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	0.53	J	0.35	J	0.80		0.41	J	2.2		0.32	J	0.85			
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.76	U	0.65	U	0.29	J	0.77	U	0.79	J	0.77	U	0.79	U		
108-38-3	o-Xylene	NA	NA	440	Not Available	0.58	J	0.38	J	0.87		1.1		0.93		0.28	J	1.0			
NA	m&p-Xylene[2]	Not Available			Not Available	1.9		0.93		2.8		2.4		2.9		0.67	J	3.4			
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	2.5		1.3	J	3.7		3.5		3.8		0.95	J	4.4			

Notes:
Shaded indicates the value is greater than or equal to one or more of the IASLs.
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

115 River Road Indoor Air Data

Buildings 4 and 6 Indoor Air Analytical Data - March 2008, April 2008, March 2009, March 2010, May 2010, March 2011, March 2012, March 2013, December 2013/January 2014, and March 201

115 River Road Building

Edgewater, New Jersey

Building					**Building 4**														**Building 6**																	
Location					**Q1-IA-35**														**Q1-IA-28**																	
Location Description					**Bldg 4 1st Floor Conference Room (East Side)**														**Bldg 6 Half-Basement**														**Bldg 6 First Floor Storage Room**					
Field Sample ID					**Q1-IA-35-033111**		**Q1-IA-35-032312**		**Q1-IA-35-032013**		**Q1-IA-35-121913**		**Q1-IA-35-031215**		**Q1-IA-28-032308**		**Q1-IA-28-032209**		**Q1-IA-28-032010[a]**		**Q1-IA-28-052210**		**Q1-IA-28-033111**		**Q1-IA-28-032312**		**Q1-IA-28-032113**		**Q1-IA-28-011414**		**QI-IA-28-031915**					
Sample Date					**3/31/2011**		**3/23/2012**		**3/20/2013**		**12/19/2013**		**3/12/2015**		**3/23/2008**		**3/22/2009**		**3/20/2010[a]**		**5/22/2010**		**3/31/2011**		**3/23/2012**		**3/21/2013**		**1/14/2014**		**3/19/2015**					
Units					**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**					
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m^3)**																																
		10^{-6} Target Risk (µg/m^3)	**10^{-4} Target Risk (µg/m^3)**	**HQ=1 Target Risk (µg/m^3)**																																	
71-43-2	Benzene	1.6	160	130	2	0.65		1.1		0.76		1.4		3.2		7.0		0.99		2.4		1.8		0.62		1.0		3.9		0.85		4.3					
100-41-4	Ethylbenzene	4.9	490	4,400	5	0.38		1.1		0.52	J	0.81		2.5		4.7		0.43	J	1.3		1.8		0.40	J	1.3		3.5		0.61	J	2.7					
91-20-3	Naphthalene	0.36	36	13	3	3.0		2.1		2.4		2.1	B, L	1.5		1.6		0.30	U	1.9		1.0		1.9		1.4		2.1		1.3		0.6					
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	0.36		2.5		0.37	J	1.1		2.6		1.3		0.31	J	1.3		0.71		0.30	J	3.4		1.3		1.3		2.3					
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.73		0.86		0.79	U	0.3	J	0.74		0.65	J	0.12	J	0.74		0.70	U	0.63	U	1.2		0.49	J	0.37	J	0.78					
108-38-3	o-Xylene	NA	NA	440	Not Available	0.31		0.94		0.43	J	0.97		2.7		3.4		0.59	J	1.1		1.4		0.27	J	1.1		2.0		0.64	J	2.5					
NA	m&p-Xylene[2]	Not Available			Not Available	0.85		2.8		1.1		2.4		6.7		6.9		2.1		4.8		4.9		0.70		3.4		4.0		1.7		6.2					
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	1.2		3.7		1.5	J	3.4		9.4		10		2.7	J	6.1		6.3		0.97	J	4.5		6.0		2.3	J	8.7					

Notes:

Shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

B = Analyte detected in both the sample and associated method blank.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

115 River Road Indoor Air Data

Building 7 Indoor Air Analytical Data - March 2006, July 2006, March 2008, April 2008, March 2009, March 2010, May 2010, March 2011, March 2012, March 2013, December 2013, and March 201!

115 River Road

Edgewater, New Jersey

Location						**Q1-IA-08**				**Q1-IA-09**				**Q1-IA-10**				**Q1-IA-11**			
Location Description						**Bldg 7 Kitchen Room at Entrance**				**Bldg 7 Pre-school Room**				**Bldg 7 Kitchen**				**Bldg 7 Former Daycare Toddler Room**			
Field Sample ID						**Q1-IA-08-031906**		**Q1-IA-08-073006**		**Q1-IA-09-031906**		**Q1-IA-09-073006**		**Q1-IA-10-031906**		**Q1-IA-10-073006**		**Q1-IA-11-031906**		**Q1-IA-11-073006**	
Sample Date						**3/19/2006**		**7/30/2006**		**3/19/2006**		**7/30/2006**		**3/19/2006**		**7/30/2006**		**3/19/2006**		**7/30/2006**	
Units						**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**	
		EPA Industrial IASLs																			
Cas #	**Parameter Name**	**10^{-6} Target Risk (µg/m^3)**	**10^{-4} Target Risk (µg/m^3)**	**HQ=1 Target Risk (µg/m^3)**	**NJDEP Nonresidential IASL (µg/m^3)**																
71-43-2	Benzene	1.6	160	130	2	0.73		0.76		0.68		0.75		0.64		0.69		0.78		0.72	
100-41-4	Ethylbenzene	4.9	490	4,400	5	0.31		0.64		0.26		0.7		0.21		0.56		0.28		0.58	
91-20-3	Naphthalene	0.36	36	13	3	0.33		0.94		0.33		0.9		0.27		0.77		0.25		0.86	
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	0.26		0.65		0.30		0.71		0.24		0.57		0.27		0.58	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.099	J	0.22		0.10	J	0.24		0.078	J	0.18		0.088	J	0.19	
108-38-3	o-Xylene	NA	NA	440	Not Available	0.32		0.71		0.31		0.81		0.26		0.65		0.32		0.64	
NA	m&p-Xylene[2]	Not Available			Not Available	0.84		1.8		0.79		2.0		0.69		1.6		0.80		1.6	
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	1.2		2.5		1.1		2.8		0.95		2.3		1.1		2.2	

Notes:

Shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a] = The indoor air analytical data from March 2008 were collected under non-routine operating conditions, with the Building 7/8 basement ventilation fans turned off and covered with plastic. The March 2008 indoor air analytical data from the Building 7 daycare and Building 7/8 basement were conducted to be biased high based on re-sampling performed in April 2008; therefore, these data are not usable for evaluating historical trends in indoor air concentrations.

[b] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

[c] = The parent sample collected at this location in March 2015 was not analyzed because the canister leaked during shipment.

115 River Road Indoor Air Data
Building 7 Indoor Air Analytical Data - March 2006, July 2006, March 2008, April 2008, March 2009, March 2010,
May 2010, March 2011, March 2012, March 2013, December 2013, and March 201!
115 River Road
Edgewater, New Jersey

Location						**Q1-IA-12**																									
Location Description						**Bldg 7 Former Daycare Toddler Room**																									
Field Sample ID						**Q1-IA-12-031906**		**Q1-IA-19-031906**		**Q1-IA-12-073006**		**Q1-IA-19-073006**		**Q1-IA-12-032308[a]**		**Q1-DUP1-032308[a]**		**Q1-IA-12-042708**		**Q1-DUP-042708**		**Q1-IA-12-032209**		**Q1-DUP2-032209**		**Q1-IA-12-032010[b]**		**Q1-DUP2-032010[b]**	
Sample Date						**3/19/2006**				**7/30/2006**		**7/30/2006**		**3/23/2008[a]**				**4/27/2008**				**3/22/2009**				**3/20/2010[b]**			
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**	
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m³)**																										
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																											
71-43-2	Benzene	1.6	160	130	2	0.75		0.71		0.75		0.74		3.1		3.0		0.56		0.56	U	0.98		0.98		2.9		2.3			
100-41-4	Ethylbenzene	4.9	490	4,400	5	0.32		0.31		0.65		0.86		1.7		1.7		0.25	J	0.24	J	0.44	J	0.41	J	1.3		0.96			
91-20-3	Naphthalene	0.36	36	13	3	0.34		0.47		0.93		0.82		0.61		0.41		0.59		0.38		0.58	U	0.27	U	2.0		2.6			
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	0.36		0.32		0.69		0.76		0.64	J	0.60	J	0.28	J	0.26	J	0.33	J	0.30	J	1.8		1.3			
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.11	J	0.10	J	0.23		0.26		0.29	J	0.24	J	0.61	U	1.0	U	0.14	J	0.13	J	0.98		0.79			
108-38-3	o-Xylene	NA	NA	440	Not Available	0.37		0.43		0.74	J	1.3	J	1.3		1.2		0.28	J	0.26	J	0.43	J	0.40	J	1.3		1.0			
NA	m&p-Xylene[2]	Not Available			Not Available	0.95		0.81		1.8	J	3.1	J	2.7		2.5		0.75		0.74	J	1.1		1.1		4.3		3.3			
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	1.3		1.2		2.5		4.4	J	4.0		3.7		1.0	J	1.0	J	1.5	J	1.5	J	5.6		4.3			

Notes:
Shaded indicates the value is greater than or equal to one or more of the IASLs.
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a] = The indoor air analytical data from March 2008 were collected under non-routine operating conditions, with the Building 7/8 basement ventilation fans turned off and covered with plastic. The March 2008 indoor air analytical data from the Building 7 daycare and Building 7/8 basement were conducted to be biased high based on re-sampling performed in April 2008; therefore, these data are not usable for evaluating historical trends in indoor air concentrations.
[b] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

[c] = The parent sample collected at this location in March 2015 was not analyzed because the canister leaked during shipment.

115 River Road Indoor Air Data
Building 7 Indoor Air Analytical Data - March 2006, July 2006, March 2008, April 2008, March 2009, March 2010, May 2010, March 2011, March 2012, March 2013, December 2013, and March 201!
115 River Road
Edgewater, New Jersey

						Location	**Q1-IA-12 (con't)**				**Q1-IA-26**												**Q1-IA-27**									
						Location Description	**Bldg 7 Former Daycare Toddler Room**				**Building 7 Kitchen, Next to Bathroom**												**Bldg 7 2nd Floor North Room**									
						Field Sample ID	**Q1-IA-12-052210**		**Q1-DUP2-052210**		**Q1-IA-26-032308[a]**		**Q1-IA-26-042708**		**Q1-IA-26-032209**		**Q1-IA-26-032010[b]**		**Q1-IA-26-052210**		**Q1-IA-27-032308[a]**		**Q1-IA-27-032209**		**Q1-IA-27-032010[b]**		**Q1-IA-27-052210**			
						Sample Date	**5/22/2010**				**3/23/2008[a]**		**4/27/2008**		**3/22/2009**		**3/20/2010[b]**		**5/22/2010**		**3/23/2008[a]**		**3/22/2009**		**3/20/2010[b]**		**5/22/2010**			
						Units	**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**			
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m³)**																											
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																												
71-43-2	Benzene	1.6	160	130	2	0.95		1.3		1.5		0.62	U	1.1		2.2		1.2		1.7		1.0		2.1		1.1			
100-41-4	Ethylbenzene	4.9	490	4,400	5	1.1		1.4		0.76		0.25	J	0.48	J	0.91		1.6		0.88		0.43	J	0.87		1.4			
91-20-3	Naphthalene	0.36	36	13	3	1.0		1.2		0.20		0.50		0.64	U	2.5		0.96		0.27		0.47	U	2.9		1.4			
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	0.90		1.1		0.32	J	0.30	J	0.44	J	1.3		0.83		0.37	J	0.34	J	1.3		0.77	J		
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.31	J	0.39	J	0.72	U	0.88	U	0.19	J	0.79		0.30	J	0.77	U	0.14	J	0.79		0.89	U		
108-38-3	o-Xylene	NA	NA	440	Not Available	1.1		1.4		0.61	J	0.31	J	0.47	J	0.96		1.2		0.70	J	0.43	J	0.96		1.2			
NA	m&p-Xylene[2]	Not Available			Not Available	2.8		3.5		1.3	J	0.78	J	1.2		3.1		3.1		1.5	J	1.1		3.2		3.2			
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	3.9		4.9		1.9	J	1.1	J	1.7	J	4.0		4.3		2.2	J	1.5	J	4.1		4.4			

Notes:
Shaded indicates the value is greater than or equal to one or more of the IASLs.
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a] = The indoor air analytical data from March 2008 were collected under non-routine operating conditions, with the Building 7/8 basement ventilation fans turned off and covered with plastic. The March 2008 indoor air analytical data from the Building 7 daycare and Building 7/8 basement were conducted to be biased high based on re-sampling performed in April 2008; therefore, these data are not usable for evaluating historical trends in indoor air concentrations.
[b] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

[c] = The parent sample collected at this location in March 2015 was not analyzed because the canister leaked during shipment.

115 River Road Indoor Air Data
Building 7 Indoor Air Analytical Data - March 2006, July 2006, March 2008, April 2008, March 2009, March 2010, May 2010, March 2011, March 2012, March 2013, December 2013, and March 201
115 River Road
Edgewater, New Jersey

Location						**Q1-IA-36**																		**Q1-IA-37**									
Location Description						**Bldg 7 1st Floor Far East Room**																		**Bldg 7 1st Floor West Room Next to Stairs**									
Field Sample ID						**Q1-IA-36-033111**		**Q1-DUP2-033111**		**Q1-IA-36-032312**		**Q1-DUP1-032312**		**Q1-IA-36-032013**		**Q1-DUP1-032013**		**Q1-IA-36-121913**		**Q1-DUP1-031915[c]**		**Q1-IA-37-033111**		**Q1-IA-37-032312**		**Q1-IA-37-032013**		**Q1-IA-37-121913**		**QI-IA-37-031915**	
Sample Date						**3/31/2011**				**3/23/2012**				**3/20/2013**				**12/19/2013**		**3/19/2015**		**3/31/2011**		**3/23/2012**		**3/20/2013**		**12/19/2013**		**3/19/2015**	
Units						**µg/m3**		**µg/m3**		**µg/m3**		**µg/m3**		**µg/m3**		**µg/m3**		**µg/m3**		**µg/m3**		**µg/m3**		**µg/m3**		**µg/m3**		**µg/m3**		**µg/m3**	
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m³)**																												
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																													
71-43-2	Benzene	1.6	160	130	2	0.69		0.66		1.0		1.1		4.6		4.3		1.9		1.1		0.65		1.0		3.1		1.8		0.73	
100-41-4	Ethylbenzene	4.9	490	4,400	5	0.70	J	0.67	J	0.88		0.92		3.1		2.9		1.7		0.61		0.68	J	0.99		1.9		1.9		0.63	
91-20-3	Naphthalene	0.36	36	13	3	0.85		0.92		0.59		0.54		0.78	J	0.43	J	1.9	L	1.5		0.90		0.78		0.45		2.6	L	0.31	
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	0.67	J	0.66	J	3.6		3.7		3.1		2.5		1.4		0.97		0.50	J	2.7		1.8		1.5		27	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.77	U	0.22	J	1.2		1.2		0.85		0.78		0.45	J	0.33		0.71	U	0.87		0.50	J	0.44	J	8.1	
108-38-3	o-Xylene	NA	NA	440	Not Available	0.57	J	0.51	J	0.89		0.91		3.3		3.0		1.4		0.82		0.51	J	0.97		2.0		1.5		0.99	
NA	m&p-Xylene[2]	Not Available			Not Available	2.4		2.4		2.5		2.6		9.9		9.1		3.2		2.0		2.4		2.9		5.7		3.0		2.4	
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	3.0	J	2.9	J	3.4		3.5		13		12		4.6		2.8		2.9	J	3.9		7.7		4.5		3.4	

Notes:
Shaded indicates the value is greater than or equal to one or more of the IASLs.
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a] = The indoor air analytical data from March 2008 were collected under non-routine operating conditions, with the Building 7/8 basement ventilation fans turned off and covered with plastic. The March 2008 indoor air analytical data from the Building 7 daycare and Building 7/8 basement were conducted to be biased high based on re-sampling performed in April 2008; therefore, these data are not usable for evaluating historical trends in indoor air concentrations.
[b] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

[c] = The parent sample collected at this location in March 2015 was not analyzed because the canister leaked during shipment.

115 River Road Indoor Air Data
Building 7 Indoor Air Analytical Data - March 2006, July 2006, March 2008, April 2008, March 2009, March 2010, May 2010, March 2011, March 2012, March 2013, December 2013, and March 2015
115 River Road
Edgewater, New Jersey

					Location	**Q1-IA-38**						
					Location Description	**Bldg 7 2nd Floor Main Room**						
					Field Sample ID	**Q1-IA-38-033111**		**Q1-IA-38-032312**		**Q1-IA-38-032013**		
					Sample Date	**3/31/2011**		**3/23/2012**		**3/20/2013**		
					Units	**µg/m³**		**µg/m³**		**µg/m³**		
		EPA Industrial IASLs										
Cas #	**Parameter Name**	**10^{-6} Target Risk (µg/m³)**	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**	**NJDEP Nonresidential IASL (µg/m³)**							
71-43-2	Benzene	1.6	160	130	2	0.56		0.94		2.9		
100-41-4	Ethylbenzene	4.9	490	4,400	5	0.60	J	0.86		1.7		
91-20-3	Naphthalene	0.36	36	13	3	0.78		0.43		0.53		
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	0.46	J	6.10		1.5		
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.74	U	1.80		0.47	J	
108-38-3	o-Xylene	NA	NA	440	Not Available	0.44	J	0.93		1.8		
NA	m&p-Xylene[2]	Not Available			Not Available	2.1		2.40		5.0		
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	2.5	J	3.30		6.8		

Notes:
Shaded indicates the value is greater than or equal to one or more of the IASLs.
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a] = The indoor air analytical data from March 2008 were collected under non-routine operating conditions, with the Building 7/8 basement ventilation fans turned off and covered with plastic. The March 2008 indoor air analytical data from the Building 7 daycare and Building 7/8 basement were conducted to be biased high based on re-sampling performed in April 2008; therefore, these data are not usable for evaluating historical trends in indoor air concentrations.
[b] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

[c] = The parent sample collected at this location in March 2015 was not analyzed because the canister leaked during shipment.

115 River Road Indoor Air Data

Building 7/8 Basement Indoor Air Analytical Data - March 2006, July 2006, March 2008, April 2008, March 2009, March 2010, May 2010, March 2011, March 2012, March 2013, December 2013, April 2014, and March 2015

115 River Road Building

Edgewater, New Jersey

Location						**Q1-IA-21**																	
Location Description						**Bldg 7/8 Basement Hallway Near Sump 2**																	
Field Sample ID						**Q1-IA-21-073006**		**Q1-IA-21-032308[a]**		**Q1-IA-21-042708**		**Q1-IA-21-032209**		**Q1-IA-21-032010[b]**		**Q1-IA-21-052210**		**Q1-IA-21-033111**		**Q1-DUP4-033111**		
Sample Date						**7/30/2006**		**3/23/2008[a]**		**4/27/2008**		**3/22/2009**		**3/20/2010[b]**		**5/22/2010**		**3/31/2011**					
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**			
		EPA Industrial IASLs																					
Cas #	**Parameter Name**	**10^{-6} Target Risk (µg/m³)**	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**	**NJDEP Nonresidential IASL (µg/m³)**																		
71-43-2	Benzene	1.6	160	130	2	1.8		20		12		4.2		7.0		3.0		1.2		1.1			
100-41-4	Ethylbenzene	4.9	490	4,400	5	1.6		16		7.1		3.8		4.8		2.1		0.83		0.83	J		
91-20-3	Naphthalene	0.36	36	13	3	4.6		11		10		3.2		7.9		4.2		2.1		0.44			
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	1.3		5.1		3.0		1.6		3.2		1.4		0.54	J	0.45	J		
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.53		2.5		1.4		0.88		1.4		0.50	J	0.24	J	1.1	U		
108-38-3	o-Xylene	NA	NA	440	Not Available	1.5		12		6.6		3.0		3.7		1.9		0.59	J	0.58	J		
NA	m&p-Xylene[2]	Not Available			Not Available	3.8		22		9.9		5.2		11		4.4		1.5		1.7			
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	5.3		34		17		8.2		15		6.3		2.1	J	2.3	J		

Notes:

Shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

D = The reported result is from a dilution.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a] = The indoor air analytical data from March 2008 were collected under non-routine operating conditions, with the Building 7/8 basement ventilation fans turned off and covered with plastic. The March 2008 indoor air analytical data from the Building 7 daycare and Building 7/8 basement were conducted to be biased high based on re-sampling performed in April 2008; therefore, these data are not usable for evaluating historical trends in indoor air concentrations.

[b] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

115 River Road Indoor Air Data

Building 7/8 Basement Indoor Air Analytical Data - March 2006, July 2006, March 2008, April 2008, March 2009, March 2010, May 2010, March 2011, March 2012, March 2013, December 2013, April 2014, and March 2015

115 River Road Building

Edgewater, New Jersey

Location						**Q1-IA-21 (con't)**														**Q1-IA-23**																	
Location Description						**Bldg 7/8 Basement Hallway Near Sump 2**														**Bldg 7/8 Basement far East Room - Next to Floor Drain**																	
Field Sample ID						**Q1-IA-21-032312**		**Q1-IA-21-032013**		**Q1-DUP2-032013**		**Q1-IA-21-121913**		**Q1-DUP2-121913**		**Q1-IA-21-052015**		**Q1-DUP2-052015**		**Q1-IA-23-032308[a]**		**Q1-DUP2-032308**		**Q1-IA-23-042708**		**Q1-IA-23-032209**		**Q1-IA-23-032010[b]**		**Q1-IA-23-052510**		**Q1-DUP4-052510**		**Q1-IA-23-033111**	
Sample Date						**3/23/2012**		**3/20/2013**				**12/19/2013**				**5/20/2015**				**3/23/2008[a]**				**4/27/2008**		**3/22/2009**		**3/20/2010[b]**		**5/25/2010**		**5/25/2010**		**3/31/2011**	
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**	
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m³)**																																
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																																
71-43-2	Benzene	1.6	160	130	2	1.4		4.1		4.2		3.8		3.9		1.6		1.9		19		18		8.7		4.3		4.2		2.1		2.1		0.95	
100-41-4	Ethylbenzene	4.9	490	4,400	5	1.8		4.3		4.3		4.2		4.4		2.1		2.3		15		14		5.3		3.6		0.83		1.6		1.5		0.67	J
91-20-3	Naphthalene	0.36	36	13	3	2.3		5.2		5.2		9.9	L	10	L	9.5	J	14	J	6.6	J	9.7	J	3.6		2.5		0.10	U	2.3		2.2		1.3	
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	2.6		1.7		1.7		2.1		2.2		1.2	J	1.7	J	4.1		4.2		1.8		1.5		0.10	U	1.2		0.98		0.43	J
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.91		0.84		0.85		0.76		0.77		0.36		0.49		1.9		2.0		0.83		0.75		0.54		0.41	J	0.35	J	0.68	U
108-38-3	o-Xylene	NA	NA	440	Not Available	1.4		2.6		2.6		2.5		2.6		1.3		1.7		10		10		4.4		2.9		0.087	U	1.4		1.2		0.48	J
NA	m&p-Xylene[2]	Not Available			Not Available	3.1		5.2		5.2		4.5		4.7		2.6		3.5		21		20		8.3		5.5		1.2		3.9		3.4		1.6	
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	4.5		7.8		7.8		7		7.3		3.9		5.2		31		30		13		8.4		1.2		5.3		4.6		2.1	J

Notes:

Shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

D = The reported result is from a dilution.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a] = The indoor air analytical data from March 2008 were collected under non-routine operating conditions, with the Building 7/8 basement ventilation fans turned off and covered with plastic. The March 2008 indoor air analytical data from the Building 7 daycare and Building 7/8 basement were conducted to be biased high based on re-sampling performed in April 2008; therefore, these data are not usable for evaluating historical trends in indoor air concentrations.

[b] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

115 River Road Indoor Air Data

Building 7/8 Basement Indoor Air Analytical Data - March 2006, July 2006, March 2008, April 2008, March 2009, March 2010, May 2010, March 2011, March 2012, March 2013, December 2013, April 2014, and March 2015

115 River Road Building

Edgewater, New Jersey

Location						**Q1-IA-23 (con't)**								**Q1-IA-24**																	
Location Description						**Bldg 7/8 Basement far East Room - Next to Floor Drain**								**Bldg 7/8 Basement far West Room - Next to Elevator**																	
Field Sample ID						**Q1-IA-23-032312**		**Q1-IA-23-032013**		**Q1-IA-23-121913**		**Q1-IA-23-052015**		**Q1-IA-24-032308[a]**		**Q1-IA-24-032209**		**Q1-IA-24-032010[b]**		**Q1-IA-24-052210**		**Q1-IA-24-033111**		**Q1-IA-24-040814**		**Q1-IA-24-052015**		**Q1-DUP4-052015**	
Sample Date						**3/23/2012**		**3/20/2013**		**12/19/2013**		**5/20/2015**		**3/23/2008[a]**		**3/22/2009**		**3/20/2010[b]**		**5/22/2010**		**3/31/2011**		**4/8/2014**		**5/20/2015**			
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**	
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m³)**																										
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																											
71-43-2	Benzene	1.6	160	130	2	1.0		3.0		2.1		1.4		9.1		0.96		2.8		1.9		0.96		3.5		3.3		3.1			
100-41-4	Ethylbenzene	4.9	490	4,400	5	1.9		3.0		1.8		1.4		7.1		0.41	J	1.3		1.6		0.78		2.8		5.3		4.8			
91-20-3	Naphthalene	0.36	36	13	3	0.68		2.6		3.0	L	2.1		3.5		0.45	U	2.2		1.3		1.3		2.9	L	22	D	20	D		
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	5.3		1.3		1.0		1.5		2.3		0.32	J	1.3		1.1		0.50	J	1.1	J	5.7	J	2.5	J		
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	2.2		0.53	J	0.40	J	0.43		1.1		0.13	J	0.79		0.45	J	0.22	J	0.41	J	1.4	J	0.84	J		
108-38-3	o-Xylene	NA	NA	440	Not Available	1.5		1.8		1.2		1.6		5.2		0.40	J	1.0		1.4		0.59	J	1.8		3.9	J	2.7	J		
NA	m&p-Xylene[2]	Not Available			Not Available	5.1		3.6		2.4		4.7		9.7		0.98		3.3		3.5		1.0		3.9		8.1	J	5.1	J		
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	6.6		5.4		3.6		6.3		15		1.4	J	4.3		4.9		1.6	J	5.7		12		7.8			

Notes:

Shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

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J = Data below calibration curve for that constituent, quantity estimated.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

D = The reported result is from a dilution.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a] = The indoor air analytical data from March 2008 were collected under non-routine operating conditions, with the Building 7/8 basement ventilation fans turned off and covered with plastic. The March 2008 indoor air analytical data from the Building 7 daycare and Building 7/8 basement were conducted to be biased high based on re-sampling performed in April 2008; therefore, these data are not usable for evaluating historical trends in indoor air concentrations.

[b] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

115 River Road Indoor Air Data

Building 7/8 Basement Indoor Air Analytical Data - March 2006, July 2006, March 2008, April 2008, March 2009, March 2010, May 2010, March 2011, March 2012, March 2013, December 2013, April 2014, and March 2015

115 River Road Building

Edgewater, New Jersey

		EPA Industrial IASLs																					
Location						**Q1-IA-25**																	
Location Description						**Bldg 7/8 Basement next to Sump 1**																	
Field Sample ID						**Q1-IA-25-032308[a]**		**Q1-IA-25-032209**		**Q1-IA-25-032010[b]**		**Q1-IA-25-052210**		**Q1-IA-25-033111**		**Q1-IA-25-032312**		**Q1-IA-25-032013**		**Q1-IA-25-121913**		**Q1-IA-25-052015**	
Sample Date						**3/23/2008[a]**		**3/22/2009**		**3/20/2010[b]**		**5/22/2010**		**3/31/2011**		**3/23/2012**		**3/20/2013**		**12/19/2013**		**5/20/2015**	
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**	
Cas #	**Parameter Name**	**10^{-6} Target Risk (µg/m³)**	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**	**NJDEP Nonresidential IASL (µg/m³)**																		
71-43-2	Benzene	1.6	160	130	2	10		1.4		3.8		1.3		0.98		2.7		4.4		7.5		2.3	
100-41-4	Ethylbenzene	4.9	490	4,400	5	8.4		0.64	J	2.0		0.97		0.70	J	4.9		4.9		7.9		3.5	
91-20-3	Naphthalene	0.36	36	13	3	6.3		1.4		4.5		1.7		1.1		2.0		9.3		28	L	18	D
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	2.7		0.44	J	2.1		0.75	J	0.48	J	17		2.2		3.8		1.8	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	1.3		0.18	J	0.98		0.79	U	0.73	U	6.1		1.0		1.1		0.55	
108-38-3	o-Xylene	NA	NA	440	Not Available	6.2		0.62	J	1.9		0.81		0.51	J	4.4		3.6		4.0		2.0	
NA	m&p-Xylene[2]	Not Available			Not Available	12		1.4		6.5		2.0		1.0		12		6.6		6.1		3.8	
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	18		2.0	J	8.3		2.8		1.5	J	16		10		10		5.8	

Notes:

Shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

D = The reported result is from a dilution.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a] = The indoor air analytical data from March 2008 were collected under non-routine operating conditions, with the Building 7/8 basement ventilation fans turned off and covered with plastic. The March 2008 indoor air analytical data from the Building 7 daycare and Building 7/8 basement were conducted to be biased high based on re-sampling performed in April 2008; therefore, these data are not usable for evaluating historical trends in indoor air concentrations.

[b] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

115 River Road Indoor Air Data
Buildings 8 and 9 Indoor Air Analytical Data - March 2006, July 2006, March 2008, March 2013, December 2013, April 2014, and March 2015
115 River Road Building
Edgewater, New Jersey

Building						**Building 8**																	
Location						**Q1-IA-06**								**Q1-IA-07**				**Q1-IA-42**				**Q1-IA-43**			
Location Description						**Bldg 8 2nd floor, Conference Room**								**Bldg 8 2nd floor, Middle Office**				**Suite 824 - Inner Office Near Elevator**				**Suite 830 - Entrance Area Near Elevator**			
Field Sample ID						**Q1-IA-06-031906**		**Q1-IA-09-031906**		**Q1-IA-06-073006**		**Q1-IA-06-032308**		**Q1-IA-07-031906**		**Q1-IA-07-073006**		**Q1-IA-42-121913**		**Q1-IA-42-031115**		**Q1-IA-43-121913**		**Q1-IA-43-031115**	
Sample Date						**3/19/2006**		**3/19/2006**		**7/30/2006**		**3/23/2008**		**3/19/2006**		**7/30/2006**		**12/19/2013**		**3/11/2015**		**12/19/2013**		**3/11/2015**	
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**	
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m³)**																				
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																					
71-43-2	Benzene	1.6	160	130	2	0.88		0.68		0.61		0.61		0.72		0.63		2.2		1.6		2.2		1.9	
100-41-4	Ethylbenzene	4.9	490	4,400	5	1.1		0.26		0.66		0.36	J	0.64		0.67		2.3		1.8		3.2		2.3	
91-20-3	Naphthalene	0.36	36	13	3	2.1		0.33		2.3		0.97		1.6		2.8		1.8	B, L	0.90		3.9	B, L	1.8	
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	1.0		0.30		0.68		0.5	J	0.66		0.79		1.4		1.7		1.8		1.8	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.35		0.10	J	0.23		0.16	J	0.22		0.25		0.43	J	0.46		0.59	J	0.52	
108-38-3	o-Xylene	NA	NA	440	Not Available	1.2		0.31		0.72		0.34	J	0.83		0.71		1.9		2.3		4.1		2.3	
NA	m&p-Xylene[2]	Not Available			Not Available	3.3		0.79		2.0		0.97	J	2.2		1.9		6.0		7.2		9.3		7.2	
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	4.5		1.1		2.7		1.3		3.0		2.6		7.9		9.5		13		9.5	

Notes:
Shaded indicates the value is greater than or equal to one or more of the IASLs.
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

115 River Road Indoor Air Data
Buildings 8 and 9 Indoor Air Analytical Data - March 2006, July 2006, March 2008, March 2013, December 2013, April 2014, and March 2015
115 River Road Building
Edgewater, New Jersey

Building					**Building 9**														**Building 9**													
Location					**Q1-IA-04 and Q1-IA-40**												**Q1-IA-05**								**Q1-IA-41**							
Location Description					**Bldg 9 1st Floor, West Side**												**Bldg 9 2nd Floor Office, West**								**Bldg 9 1st Floor East Side Storage Room**							
Field Sample ID					**Q1-IA-04-031906**		**Q1-IA-04-073006**		**Q1-IA-04-032308**		**Q1-IA-40-032113**		**Q1-IA-40-121813**		**Q1-IA-40-031115**		**Q1-IA-05-031906**		**Q1-IA-05-073006**		**Q1-IA-05-032308**		**Q1-IA-41-032113**		**Q1-IA-41-121813**		**Q1-DUP1-121813**		**Q1-IA-41-040814**		**Q1-DUP1-040814**		**Q1-IA-41-031215**	
Sample Date					**3/19/2006**		**7/30/2006**		**3/23/2008**		**3/21/2013**		**12/18/2013**		**3/11/2015**		**3/19/2006**		**7/30/2006**		**3/23/2008**		**3/21/2013**		**12/18/2013**				**4/8/2014**				**3/12/2015**	
Units					**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m3**	
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m³)**																												
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																													
71-43-2	Benzene	1.6	160	130	2	0.99		1.1		1.8		3.2		4.0		1.6		1.0		1.7	J	1.9		5.9		20		22		5.7		5.5		0.59	
100-41-4	Ethylbenzene	4.9	490	4,400	5	0.99		1.8		1.4		2.0		2.6		0.83		0.99		2		1.4		7.2		28		30		5.3	U	4.8	U	0.31	
91-20-3	Naphthalene	0.36	36	13	3	2.2		1.4		1.5		2.2		0.8		0.5		2.1		2		1.2		5.4		29		100		1.1	L	0.69	J, L	0.055	
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	1.1		1.3		0.87		1.4		1.0		0.93		1.1		1.3	J	0.81		3.5		12		16		5.3	U	4.8	U	0.21	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.39		0.46		0.33	J	0.51	J	0.35	J	0.29		0.46		0.53	J	0.33	J	1.6		3.9		4.9		5.3	U	4.8	U	0.071	J
108-38-3	o-Xylene	NA	NA	440	Not Available	0.97		1.6		1.1		1.6		1.4		0.89		1.0		2.0		1.2		4.8		13		14		5.3	U	4.8	U	0.33	
NA	m&p-Xylene[2]	Not Available			Not Available	2.3		3.6		2.5		3.6		2.3		2.2		2.3		3.9		2.7		9.1		19		21		5.3	U	4.8	U	0.82	
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	3.3		5.2		3.6		5.2		3.7		3.1		3.3		5.9		3.9		14		32		35		5.3	U	4.8	U	1.15	

Notes:
Shaded indicates the value is greater than or equal to one or more of the IASLs.
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

115 River Road Indoor Air Data

Buildings 10 and 11 Indoor Air Analytical Data - March 2006, July 2006, March 2008, March 2009, March 2010, May 2010, March 2011, March 2013, December 2013, and March 2015

115 River Road Building

Edgewater, New Jersey

Building						**Building 10**																			
Location						**Q1-IA-01**						**Q1-IA-02**						**Q1-IA-03**							
Location Description						**Bldg 10 3rd floor conference room**						**Bldg 10 1st Floor, Right stairwell at entrance**						**Bldg 10 Basement in northeastern most storage room**							
Field Sample ID						**Q1-IA-01-031906**		**Q1-IA-01-073006**		**Q1-IA-01-032808**		**Q1-IA-02-031906**		**Q1-IA-02-073006**		**Q1-IA-02-032808**		**Q1-IA-03-031906**		**Q1-IA-03-073006**		**Q1-IA-03-032308**		**Q1-IA-03-031015**	
Sample Date						**3/19/2006**		**7/30/2006**		**3/28/2008**		**3/19/2006**		**7/30/2006**		**3/28/2008**		**3/19/2006**		**7/30/2006**		**3/28/2008**		**3/10/2015**	
Units						**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**	
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m³)**																				
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																					
71-43-2	Benzene	1.6	160	130	2	0.89		0.90		NA		0.73		0.93		0.56		0.73		1.1		0.76		2.1	
100-41-4	Ethylbenzene	4.9	490	4,400	5	1.2		4.6		NA		0.55		2.2		0.69	U	0.24		1.7		0.48	J	1.2	
91-20-3	Naphthalene	0.36	36	13	3	1.3		8.3		NA		0.37		2.1		0.14	U	0.36		1.6		0.31		1.2	
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	1.0		16		NA		0.54		5.1		0.69	U	0.32		2.6		0.27	J	0.82	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.32		4.1		NA		0.18		1.3		0.69	U	0.11	J	0.86		0.75	U	0.24	
108-38-3	o-Xylene	NA	NA	440	Not Available	1.5		6.6		NA		0.79		2.8		0.69	U	0.32		2		0.43	J	0.96	
NA	m&p-Xylene[2]	Not Available			Not Available	4.7		16		NA		2.1		6.6		0.35	J	0.81		4.9		1.4	J	2.2	
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	6.2		23		NA		2.9		9.4		1.0		1.1		6.9		1.8		3.2	

Notes:

Shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

NA = Not Analyzed

B = Analyte detected in both the sample and associated method blank.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

115 River Road Indoor Air Data

Buildings 10 and 11 Indoor Air Analytical Data - March 2006, July 2006, March 2008, March 2009, March 2010, May 2010, March 2011, March 2013, December 2013, and March 2015

115 River Road Building

Edgewater, New Jersey

Building						**Building 10**																	
Location						**Q1-IA-22**																**Q1-IA-44**	
Location Description						**Bldg 10 Basement Main Room**																**Suite 1001 - Center of Main Room**	
Field Sample ID						**Q1-IA-22-032308**		**Q1-IA-22-032209**		**Q1-IA-22-032110[a]**		**Q1-IA-22-052210**		**Q1-IA-22-033111**		**Q1-IA-22-032013**		**Q1-IA-22-121913**		**Q1-IA-22-031115**		**Q1-IA-44-121813**	**Q1-IA-44-031115**
Sample Date						**3/23/2008**		**3/22/2009**		**3/21/2010**		**5/22/2010**		**3/31/2011**		**3/20/2013**		**12/19/2013**		**3/11/2015**		**12/18/2013**	**3/11/2015**
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**	**µg/m³**
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m³)**																		
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																			
71-43-2	Benzene	1.6	160	130	2	0.79		1.4		1.8		0.69		0.65		1.4		2.0		2.5		1.5	2.4
100-41-4	Ethylbenzene	4.9	490	4,400	5	0.81		1.7		0.87		1.2		0.50	J	0.76	J	0.49	J	1.5		0.84	1.3
91-20-3	Naphthalene	0.36	36	13	3	0.55		0.85		0.84		0.69		0.41		0.55		0.69	B, L	1.8		0.81	0.3
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	0.44	J	2.7		1.1		1.1		0.40	J	0.63	J	0.65		1.3		2.2	1.1
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.17	J	0.89		0.79		0.36	J	0.68	U	0.27	J	0.21	J	0.46		0.66	J 0.32
108-38-3	o-Xylene	NA	NA	440	Not Available	0.64		1.4		0.74		1.0		0.39	J	0.61	J	0.70		1.2		0.97	1.4
NA	m&p-Xylene[2]	Not Available			Not Available	2.4		4.8		2.7		3.4		1.5		1.3		1.5		2.7		2.3	4.4
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	3.0		6.2		3.5		4.4		1.9	J	1.9	J	2.2		3.9		3.3	5.8

Notes:

Shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

NA = Not Analyzed

B = Analyte detected in both the sample and associated method blank.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

115 River Road Indoor Air Data

Buildings 10 and 11 Indoor Air Analytical Data - March 2006, July 2006, March 2008, March 2009, March 2010, May 2010, March 2011, March 2013, December 2013, and March 2015

115 River Road Building

Edgewater, New Jersey

		EPA Industrial IASLs				Building	Building 10				Building 11							
						Location	Q1-IA-45				Q1-IA-39							
						Location Description	Suite 1003 - Center of Reception Area				Bldg 11 Center of Main Room	Bldg 11 West Side of Main Room						
						Field Sample ID	Q1-IA-45-121813		Q1-IA-45-031115		Q1-IA-39-040111	Q1-IA-39-032013		Q1-IA-39-121813		Q1-IA-39-031115		
						Sample Date	12/18/2013		3/11/2015		4/1/2011	3/20/2013		12/18/2013		3/11/2015		
						Units	µg/m³		µg/m³		µg/m³	µg/m³		µg/m³		µg/m³		
Cas #	Parameter Name	10^{-6} Target Risk (µg/m³)	10^{-4} Target Risk (µg/m³)	HQ=1 Target Risk (µg/m³)	NJDEP Nonresidential IASL (µg/m³)													
71-43-2	Benzene	1.6	160	130	2		1.1		3.0		2.3		0.72		0.98		1.9	
100-41-4	Ethylbenzene	4.9	490	4,400	5		0.44	J	1.9		1.9		0.42	J	0.67	J	0.93	
91-20-3	Naphthalene	0.36	36	13	3		1.4		4.8		0.52		0.24		1.5		0.56	
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available		0.51	J	1.6		2.0		0.56	J	0.45	J	0.86	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available		0.86	U	0.6		0.52	J	0.73	U	0.71	U	0.28	
108-38-3	o-Xylene	NA	NA	440	Not Available		0.44	J	1.5		1.9		0.61	J	0.78		0.99	
NA	m&p-Xylene[2]	Not Available			Not Available		1.2		3.0		6.2		6.2		4.7		3.4	
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440		1.6	J	4.5		8.1		6.8	J	5.5		4.4	

Notes:

Shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

NA = Not Analyzed

B = Analyte detected in both the sample and associated method blank.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

115 River Road Indoor Air Data
Crawl Space Air Analytical Data - March 2010, May 2010, March 2011, March 2012, March 2013, December 2013, and March 2015
115 River Road Building
Edgewater, New Jersey

Building						**Building 6**																									
Location						**Q1-CS-01**																									
Location Description						**Northwest Side (through Bldg 7/8 basement access point)**																									
Field Sample ID						**Q1-CS-01-032010[a]**		**Q1-DUP3-032010[a]**		**Q1-CS-01-052210**		**Q1-DUP3-052210**		**Q1-CS-01-033111**		**Q1-DUP3-033111**		**Q1-CS-01-032312**		**Q1-DUP2-032312**		**Q1-CS-01-032013**		**Q1-DUP3-032013**		**Q1-CS-01-121913**		**Q1-DUP3-121913**		**Q1-CS-01-052015**		**Q1-DUP3-052015**	
Sample Date						**3/20/2010[a]**				**5/22/2010**				**3/31/2011**				**3/23/2012**				**3/20/2013**				**12/19/2013**				**5/20/2015**			
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**	
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m³)**																												
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																													
71-43-2	Benzene	1.6	160	130	2	3.5		3.2	J	1.2	J	2.9	J	0.87		0.86		1.1		1.0		3.4		3.6		1.7		1.6		1.6		1.6	
100-41-4	Ethylbenzene	4.9	490	4,400	5	2.1		1.8	J	2.0		2.9		1.7		1.6		2.8		2.8		3.6		3.6		1.8		1.7		1.7		1.8	
91-20-3	Naphthalene	0.36	36	13	3	1.8	J	1.0	J	1.2	J	2.1	J	1.3		1.1		1.3		1.2		1.3		0.99		0.78	B, L	0.68	B, L	1.9		2.4	
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	1.4		1.1	J	0.89		1.4		0.60	J	0.44	J	8.1		7.5		1.3		1.3		0.99		0.92		1.6		1.6	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.84		0.79		0.29	J	0.46	J	0.69	U	0.75	U	3.4		3.2		0.62	J	0.55	J	0.29	J	0.3	J	0.42		0.43	
108-38-3	o-Xylene	NA	NA	440	Not Available	1.4		1.2	J	1.4		2.3		0.60	J	0.59	J	2.3		2.2		2.2		2.1		1.6		1.5		1.9		1.9	
NA	m&p-Xylene[2]	Not Available			Not Available	5.2		4.2	J	5.8	J	8.1	J	4.8		4.5		8.2		8.1		6.5		6.1		4.5		4.2		5.5		5.6	
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	6.5		5.6		7.2		10		5.4	J	5.1	J	11		10		8.7		8.2		6.1		5.7		7.4		7.5	

Notes:

Shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

B = Analyte detected in both the sample and associated method blank.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

[b] = Location changed in March 2013 event; Building 3 North Side (through hole in floor)

115 River Road Indoor Air Data

Crawl Space Air Analytical Data - March 2010, May 2010, March 2011, March 2012, March 2013, December 2013, and March 2

115 River Road Building

Edgewater, New Jersey

					Building	Building 6			Building 5			Building 4						
					Location	Q1-CS-02			Q1-CS-03			Q1-CS-04						
					Location Description	Bldg 6 SW side			Bldg 5 N side			South Side (through exterior vent)						
					Field Sample ID	Q1-CS-02-032010[a]	Q1-CS-03-052210	Q1-CS-02-033111	Q1-CS-03-032010[a]	Q1-CS-03-032010	Q1-CS-03-033111	Q1-CS-04-032010[a]	Q1-CS-04-052210	Q1-CS-04-033111	Q1-CS-04-032312	Q1-CS-04-032013	Q1-CS-04-121913	Q1-CS-04-031215
					Sample Date	3/20/2010[a]	5/22/2010	3/31/2011	3/20/2010[a]	5/22/2010	3/31/2011	3/20/2010[a]	5/22/2010	3/31/2011	3/23/2012	3/20/2013	12/19/2013	3/12/2015
		EPA Industrial IASLs			Units	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m³	μg/m3
Cas #	Parameter Name	10^{-6} Target Risk (μg/m³)	10^{-4} Target Risk (μg/m³)	HQ=1 Target Risk (μg/m³)	NJDEP Nonresidential IASL (μg/m³)													
71-43-2	Benzene	1.6	160	130	2	6.1	2.1	1.3	2.9	2.1	0.63	4.8	3.7	1.1	1.4	0.95	1.1	3.3
100-41-4	Ethylbenzene	4.9	490	4,400	5	3.6	2.9	2.9	1.2	1.4	0.65 J	2.3	2.5	1.6	1.4	0.78	0.70	1.3
91-20-3	Naphthalene	0.36	36	13	3	0.79	0.46	0.87	2.5	0.67	0.67	2.4 J	3.5	1.5	3.0	0.17	1.7 L	0.36
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available	0.98	1.4	0.28 J	0.98	1.2	0.18 J	1.6	1.9	0.42 J	2.2	0.41 J	0.62 J	1.5
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.88	0.44 J	0.85 U	0.74	0.34 J	0.70 U	0.93	0.62 J	0.70 U	0.77	0.67 U	0.69 U	0.38
108-38-3	o-Xylene	NA	NA	440	Not Available	1.9	2.2	0.59 J	0.83	1.2	0.24 J	1.7	2.3	0.71	1.2	0.55 J	0.76	1.3
NA	m&p-Xylene[2]	Not Available			Not Available	5.6	11	7.6	2.5	4.8	1.7	4.8	6.9	3.7	3.4	2.1	1.9	3.8
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	7.4	13	8.2 J	3.3	6.0	1.9 J	6.5	9.2	4.4	4.6	2.7 J	2.7	5.1

Notes:

Shaded indicates the value is greater than or equal to one or more of the IASLs.

D= The reported result is from a dilution.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

B = Analyte detected in both the sample and associated method blank.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[a] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

[b] = Location changed in March 2013 event; Building 3 North Side (through hole in floor)

115 River Road Indoor Air Data
Crawl Space Air Analytical Data - March 2010, May 2010, March 2011, March 2012, March 2013, December 2013, and March 2
115 River Road Building
Edgewater, New Jersey

Cas #	Parameter Name	EPA Industrial IASLs 10^{-6} Target Risk (µg/m^3)	EPA Industrial IASLs 10^{-4} Target Risk (µg/m^3)	EPA Industrial IASLs HQ=1 Target Risk (µg/m^3)	NJDEP Nonresidential IASL (µg/m^3)
71-43-2	Benzene	1.6	160	130	2
100-41-4	Ethylbenzene	4.9	490	4,400	5
91-20-3	Naphthalene	0.36	36	13	3
95-63-6	1,2,4-Trimethylbenzene	NA	NA	31	Not Available
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available
108-38-3	o-Xylene	NA	NA	440	Not Available
NA	m&p-Xylene[2]	Not Available			Not Available
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440

Building		Building 3						
Location		Q1-CS-05						
Location Description		Bldg 3 SW side[b]						
Field Sample ID		Q1-CS-05-032010[a]	Q1-CS-05-052210	Q1-CS-05-033111	Q1-CS-05-032312	Q1-CS-05-032013[b]	Q1-CS-05-122013	Q1-CS-05-031215
Sample Date		3/20/2010[a]	5/22/2010	3/31/2011	3/23/2012	3/20/2013	12/20/2013	3/12/2015
Units		µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m3
71-43-2	Benzene	4.5	5.1	0.87	1.2	1.1	4.2	3.2
100-41-4	Ethylbenzene	2.0	3.1	0.94	1.1	1.3	2.6	5.4
91-20-3	Naphthalene	6.8	2.4	0.70	1.3	1.7	2.0 L	1.8
95-63-6	1,2,4-Trimethylbenzene	1.7	2.3	0.26 J	3.5	0.86	1.6	1.6
108-67-8	1,3,5-Trimethylbenzene[1]	0.93	0.72 J	0.61 U	1.1	0.33 J	0.57 J	0.55
108-38-3	o-Xylene	1.6	3.0	0.35 J	1.0	0.85	2.2	1.7
NA	m&p-Xylene[2]	4.8	8.4	2.1	2.9	3.1	5.1	3.6
1330-20-7	Xylenes (total) - sum of isomers	6.1	11	2.5 J	3.9	4.0	7.3	5.3

Building		Building 3			Building 2					
Location		Q1-CS-06			Q1-CS-07					
Location Description		Bldg 3 SE side			South Side (through exterior vent)					
Field Sample ID		Q1-CS-06-032010[a]	Q1-CS-06-052210	Q1-CS-06-033111	Q1-CS-07-052210	Q1-CS-07-033111	Q1-CS-07-032312	Q1-CS-07-032013	Q1-CS-07-121913	Q1-CS-07-03121
Sample Date		3/20/2010[a]	5/22/2010	3/31/2011	5/22/2010	3/31/2011	3/23/2012	3/20/2013	12/19/2013	3/12/2015
Units		µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m3
71-43-2	Benzene	6.4	4.5	0.64	2.6	1.2	1.5	1.0	1.1	0.75
100-41-4	Ethylbenzene	2.6	2.9	0.58 J	2.2	1.1	1.5	0.81	0.54 J	0.33
91-20-3	Naphthalene	5.0	4.6	0.15	6.1	0.53	2.5	1.4	1.2 B, L	0.28
95-63-6	1,2,4-Trimethylbenzene	1.9	1.8	0.18 J	1.4	0.30 J	4.2	0.49 J	0.59 J	0.38
108-67-8	1,3,5-Trimethylbenzene[1]	0.98	0.63 J	0.60 U	0.49 J	0.70 U	1.5	0.68 U	0.7 U	0.11 J
108-38-3	o-Xylene	2.0	2.2	0.23 J	1.7	0.48 J	1.2	0.54 J	0.69 J	0.39
NA	m&p-Xylene[2]	4.8	7.0	1.4	5.2	2.2	3.0	1.8	1.8	1.1
1330-20-7	Xylenes (total) - sum of isomers	6.9	9.2	1.6 J	6.9	2.7 J	4.2	2.3 J	2.5 J	1.5

Notes:
Shaded indicates the value is greater than or equal to one or more of the IASLs.
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
B = Analyte detected in both the sample and associated method blank.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.
[a] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

[b] = Location changed in March 2013 event; Building 3 North Side (through hole in floor)

115 River Road Indoor Air Data
Subslab Soil Gas Analytical Data - March 2006, July 2006, March 2008, March 2009, March 2010, May 2010, April 2011, March 2013, and March 2015
115 River Road Building
Edgewater, New Jersey

Building						**Building 7/8**																			
Location						**Q1-VI-06**																			
Location Description						**Bldg 7/8 basement next to Sump 1**																			
Field Sample ID						**Q1-VI-06-031906**		**Q1-VI-06-072906**		**Q1-VI-06-032408**		**Q1-VI-06-032109**		**Q1-DUP1-032109**		**Q1-VI-06-032210**		**Q1-DUP1-032210**		**Q1-VI-06-052410**		**Q1-DUP1-052410**		**Q1-VI-06-040111**		**Q1-DUP1-040111**	
Sample Date						**3/19/2006**		**7/29/2006**		**3/24/2008**		**3/21/2009**		**3/21/2009**		**3/22/2010**		**3/22/2010**		**5/24/2010**		**5/24/2010**		**4/1/2011**			
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**	
Cas #	**Parameter Name**	**EPA Industrial SGSLs**			**NJDEP Nonresidential SGSL (µg/m³)**																						
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																							
71-43-2	Benzene	16	1,600	1,300	79	48		130		8.9		0.90	J	1.0	J	0.64		0.67		0.65	U	0.65	J	1.9	U	1.8	U
100-41-4	Ethylbenzene	49	4,900	44,000	250	43		160		5.5	J	2.0	U	2.0	U	0.087	U	0.087	U	0.65	U	0.6	U	1.9	U	1.8	U
91-20-3	Naphthalene	3.6	360	130	26	120	J	1.1		7.8	U	13		16		0.68		0.73		1.3	U	1.3	U	1.9	U	1.8	U
95-63-6	1,2,4-Trimethylbenzene	NA	NA	310	Not Available	12		10		4.3	J	2.5		3.1		--		--		7.9		7.6		5.5		5.7	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	310	Not Available	5.3		14		2.7	J	2.0	U	2.0	U	0.10	U	0.10	U	0.68	U	0.7	U	1.9	U	1.8	U
108-38-3	o-Xylene	NA	NA	4,400	Not Available	38		140		4.2	J	2.0	U	2.0	U	0.087	U	0.087	U	0.71	U	0.7	U	1.9	U	1.8	U
NA	m&p-Xylene[2]	Not Available			Not Available	69		250		8.2	J	4.0	U	4.0	U	0.087	U	0.087	U	1.3	U	1.5	J	3.8	U	3.7	U
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	4,400	22,000	110		390		12	J	4.0	U	4.0	U	0.087	U	0.087	U	1.3	U	1.5	J	3.8	U	3.7	U

Notes:
Shaded indicates the value is greater than or equal to one or more of the SGSLs.
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

115 River Road Indoor Air Data
Subslab Soil Gas Analytical Data - March 2006, July 2006, March 2008, March 2009, March 2010, May 2010, April 2011, March 2013, and March 2015
115 River Road Building
Edgewater, New Jersey

Building						**Building 8**								**Building 9**												**Building 10**	
Location						**Q1-VI-03**		**Q1-VI-09**						**Q1-VI-10**												**Q1-VI-02**	
Location Description						**Bldg 8 Basement Former Office Area**		**Bldg 8 Basement, Elevator Shaft**						**Bldg 9 1st Floor West Side**												**Bldg 10 Basement Main Room**	
Field Sample ID						**Q1-VI-03-072906**		**Q1-VI-09-031906**		**Q1-VI-09-072906**				**Q1-VI-10-032010**		**Q1-VI-10-052210**		**Q1-VI-10-040111**		**Q1-VI-10-032113**						**Q1-VI-02-032508**	
Sample Date						**7/29/2006**		**3/19/2006**		**7/29/2006**				**3/20/2010**		**5/24/2010**		**4/1/2011**		**3/21/2013**						**3/25/2008**	
Units						**µg/m³**		**µg/m³**		**µg/m³**				**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**						**µg/m³**	
		EPA Industrial SGSLs			**NJDEP Nonresidential SGSL (µg/m³)**																						
Cas #	**Parameter Name**	**10^{-6} Target Risk (µg/m³)**	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																							
71-43-2	Benzene	16	1,600	1,300	79	4900		43		1.1				0.73		0.68	U	2.0	U	0.68						1.9	
100-41-4	Ethylbenzene	49	4,900	44,000	250	2400		38		0.88				0.087	U	0.68	U	2.0	U	2.0	U					2.3	
91-20-3	Naphthalene	3.6	360	130	26	860		62	J	1.7				0.79		1.4	J	2.0	U	2.0	U					1.9	U
95-63-6	1,2,4-Trimethylbenzene	NA	NA	310	Not Available	8.4	U	12		13				--		1.0	J	2.0	U	0.69	J					0.42	J
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	310	Not Available	240		4.9		0.40	J			0.10	U	0.72	U	2.0	U	2.0	U					2.5	
108-38-3	o-Xylene	NA	NA	4,400	Not Available	1200		31		0.78				0.087	U	0.75	U	2.0	U	2.0	U					3.3	
NA	m&p-Xylene[2]	Not Available			Not Available	3200		57		2.3				0.087	U	1.4	U	4.1	U	1.4	J					8.9	
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	4,400	22,000	4400		88		3.1				0.087	U	1.4	U	4.1	U	1.4	J					3.8	

Notes:
Shaded indicates the value is greater than or equal to one or more of the SGSLs.
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

115 River Road Indoor Air Data
Subslab Soil Gas Analytical Data - March 2006, July 2006, March 2008, March 2009, March 2010, May 2010, April 2011, March 2013, and March 2015
115 River Road Building
Edgewater, New Jersey

Building						**Building 12**																	
Location						**Q1-VI-07**										**Q1-VI-08**							
Location Description						**Bldg 12 Parking Lot East Side**										**Bldg 12 Parking Lot West Side**							
Field Sample ID						**Q1-VI-07-031906**		**Q1-VI-07-032608**		**Q1-VI-07-032109**		**Q1-VI-07-032010**		**Q1-VI-07-052210**		**Q1-VI-08-031906**		**Q1-VI-08-072906**		**Q1-VI-08-032508**		**Q1-VI-08-032109**		**Q1-VI-08-032010**	
Sample Date						**3/19/2006**		**3/26/2008**		**3/21/2009**		**3/20/2010**		**5/24/2010**		**3/19/2006**		**7/29/2006**		**3/25/2008**		**3/21/2009**		**3/20/2010**	
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**	
Cas #	**Parameter Name**	**EPA Industrial SGSLs**			**NJDEP Nonresidential SGSL (µg/m³)**																				
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																					
71-43-2	Benzene	16	1,600	1,300	79	3.2	J	2.0		2.0	U	0.64		0.65	U	0.82	J	0.74	J	0.65	J	2.0	U	0.77	
100-41-4	Ethylbenzene	49	4,900	44,000	250	2.5	J	1.3	J	2.0	U	0.087	U	0.65	U	1.4	J	0.58		0.38	J	2.0	U	0.087	U
91-20-3	Naphthalene	3.6	360	130	26	22	J	1.8	U	7.6		0.84		1.3	U	9.0	J	0.92		1.8	U	16		2.3	
95-63-6	1,2,4-Trimethylbenzene	NA	NA	310	Not Available	0.50	J	0.37	J	2.0	U	--		1.2	J	3.3	J	13		2.9		2.6		--	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	310	Not Available	0.76	J	1.3	J	2.0	U	0.10	U	0.69	U	0.42	J	0.21	J	1.8	U	2.0	U	0.10	U
108-38-3	o-Xylene	NA	NA	4,400	Not Available	1.3	J	2.2		2.0	U	0.087	U	0.72	U	0.59	J	0.39	J	0.47	J	0.52	J	0.087	U
NA	m&p-Xylene[2]	Not Available			Not Available	2.5	J	6.5		3.9	U	0.087	U	1.3	U	1.6	J	1.5		1.4	J	4.0	U	0.087	U
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	4,400	22,000	3.8	J	8.7		3.9	U	0.087	U	1.3	U	2.2	J	1.9	J	1.9	J	0.52	J	0.087	U

Notes:
Shaded indicates the value is greater than or equal to one or more of the SGSLs.
D= The reported result is from a dilution.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

115 River Road Indoor Air Data
Outdoor Air Analytical Data 115 River Road Property - March 2006, July 2006, March 2008, April 2008, March 2010, May 2010, March 2011, March 2012, March 2013, December 2013/January 2014, and March 2015
115 River Road Building
Edgewater, New Jersey

Location		Q1-OA-01								Q1-OA-02								Q1-OA-03					
Location Description		Building 6 Roof								Building 10 Roof								115 RR Bldg South Parking Lot - on Fence					
Field Sample ID		Q1-OA-01-031906		Q1-OA-01-073006		Q1-OA-01-032308		Q1-OA-01-042708		Q1-OA-02-031906		Q1-OA-02-073006		Q1-OA-02-032308		Q1-OA-02-032010[a]		Q1-OA-03-031906		Q1-OA-03-073006		Q1-OA-03-032308	
Sample Date		3/19/2006		7/30/2006		3/23/2008		4/27/2008		3/19/2006		7/30/2006		3/23/2008		3/20/2010[a]		3/19/2006		7/30/2006		3/23/2008	
Units		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3	
Cas #	Parameter Name																						
71-43-2	Benzene	0.58		0.61		0.54		0.48		0.59		0.58		0.50		2.4		0.60		0.69		0.52	
100-41-4	Ethylbenzene	0.20		0.45		0.64	U	0.16	J	0.16		0.46		0.77	U	0.69		0.18		0.42		0.77	U
91-20-3	Naphthalene	0.19		0.73		0.13	U	0.13		0.13	U	0.51		0.15	U	1.2		0.14	U	0.38		0.15	U
95-63-6	1,2,4-Trimethylbenzene	0.21		0.69		0.64	U	0.19	J	0.12	J	0.51		0.77	U	1.3		0.20		0.50		0.77	U
108-67-8	1,3,5-Trimethylbenzene	0.061	J	0.25		0.64	U	0.60	U	0.023	J	0.17		0.77	U	0.74		0.064	J	0.14	J	0.77	U
108-38-3	o-Xylene	0.25		0.55		0.64	U	0.18	J	0.19		0.52		0.77	U	0.83		0.23		0.46		0.77	U
NA	m&p-Xylene	0.67		1.4		0.32	J	0.53	J	0.52		1.5		0.40	J	2.9		0.61		1.3		0.39	J
1330-20-7	Xylenes (total) - sum of isomers	0.92		2.0		0.32	J	0.71	J	0.71		2.0		0.40	J	3.7		0.84		1.8		0.39	J

Notes:
D= The reported result is from a dilution.
U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

B = Analyte detected in both the sample and associated method blank.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[a] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

115 River Road Indoor Air Data
Outdoor Air Analytical Data 115 River Road Property - March 2006, July 2006, March 2008, April 2008, March 2010, May 2010, March 2011, March 2012, March 2013, December 2013/January 2014, and March 2015
115 River Road Building
Edgewater, New Jersey

Location	Q1-OA-03 (con't)												Q1-OA-09											
Location Description	115 RR Bldg South Parking Lot - on Fence												South of 115 RR Bldg - Next to river											
Field Sample ID	Q1-OA-03-052210		Q1-OA-03-033111		Q1-OA-03-032312		Q1-OA-03-032113		Q1-OA-03-121813		Q1-OA-03-121813		Q1-OA-09-032010[a]		Q1-OA-09-052210		Q1-OA-09-033111		Q1-OA-09-032312		Q1-OA-09-032013		Q1-OA-09-121913		Q1-OA-09-031215	
Sample Date	5/22/2010		3/31/2011		3/23/2012		3/21/2013		12/18/2013		3/11/2015		3/20/2010[a]		5/22/2010		3/31/2011		3/23/2012		3/20/2013		12/19/2013		3/12/2015	
Units	µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3	
Cas #	Parameter Name																									
71-43-2	Benzene	0.61		0.48		1.0		0.56		0.95		1.4		2.5		2.2		0.55		0.95		0.56		1.1		0.82	
100-41-4	Ethylbenzene	0.41	J	0.66	U	0.94		0.79	U	0.30	J	0.58		0.69		2.1		0.17	J	0.68	J	0.79	U	0.33	J	0.56	
91-20-3	Naphthalene	0.27		0.096		0.45		0.047		0.72	U	0.74		2.3		0.49		0.27		0.16		0.15		0.13	B, L	**1.5**	
95-63-6	1,2,4-Trimethylbenzene	0.39	U	0.66	U	4.5		0.37	J	0.25	J	0.62		1.2		0.93		0.72	U	2.0		0.79	U	0.35	J	1.1	
108-67-8	1,3,5-Trimethylbenzene	0.35	U	0.66	U	1.5		0.79	U	0.72	U	0.16		0.69		0.30	J	0.72	U	0.74		0.79	U	0.66	U	0.29	
108-38-3	o-Xylene	0.42	J	0.66	U	0.95		0.79	U	0.36	J	0.67		0.74		1.7		0.72	U	0.68	J	0.79	U	0.45	J	0.68	
NA	m&p-Xylene	1.1		0.66	U	2.6		0.79	U	0.89		1.7		2.5		4.9		0.46	J	1.9		0.79	U	0.93		1.5	
1330-20-7	Xylenes (total) - sum of isomers	1.5		0.66	U	3.6		0.79	U	1.3	J	2.4		3.3		6.6		0.46	J	2.6		0.79	U	1.4	J	2.2	

Notes:
D= The reported result is from a dilution.
U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

B = Analyte detected in both the sample and associated method blank.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[a] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

115 River Road Indoor Air Data
Outdoor Air Analytical Data 115 River Road Property - March 2006, July 2006, March 2008, April 2008, March 2010, May 2010, March 2011, March 2012, March 2013, December 2013/January 2014, and March 2015
115 River Road Building
Edgewater, New Jersey

Location		**Q1-OA-10**															
Location Description		**NW Corner of Bldg 12**															
Field Sample ID		**Q1-OA-10-052210**		**Q1-OA-10-033111**		**Q1-OA-10-032312**		**Q1-OA-10-032013**		**Q1-OA-10-011414**		**Q1-OA-10-031915**		**Q1-OA-10-052015**	
Sample Date		**5/22/2010**		**3/31/2011**		**3/23/2012**		**3/20/2013**		**1/14/2014**		**3/19/2015**		**5/20/2015**	
Units		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**		**µg/m^3**	
Cas #	**Parameter Name**														
71-43-2	Benzene	0.74		0.49		0.92		0.58		1.7		0.82		0.49	
100-41-4	Ethylbenzene	0.49	J	0.71	U	0.63	J	0.74	U	0.91		0.20		0.29	
91-20-3	Naphthalene	0.40		0.19		0.64		0.040		0.28		0.11		0.36	
95-63-6	1,2,4-Trimethylbenzene	0.53	J	0.71	U	4.5		0.74	U	0.45	J	0.25		0.33	
108-67-8	1,3,5-Trimethylbenzene	0.31	U	0.71	U	1.4		0.74	U	0.8	U	0.074		0.099	J
108-38-3	o-Xylene	0.56	J	0.71	U	0.72	J	0.74	U	0.75	J	0.24		0.33	
NA	m&p-Xylene	1.4		0.71	U	2.0		0.51	J	2.5		0.63		0.83	
1330-20-7	Xylenes (total) - sum of isomers	2.0		0.71	U	2.7		0.51	J	3.3	J	0.87		1.2	

Notes:
D= The reported result is from a dilution.
U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

B = Analyte detected in both the sample and associated method blank.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

[a] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

115 River Road Indoor Air Data
Outdoor Air Analytical Data Quanta Site and Other Offsite Background Locations - March 2006, July 2006, March 2008, April 2008, March 2009, March 2010, May 2010, March 2011, and March 201
115 River Road Building
Edgewater, New Jersey

Location		Q1-OA-04								Q1-OA-05				Q1-OA-06																	
Location Description		Quanta Site - Chained to North Fence at Side Entrance								Quanta Site - North Fence Center				Quanta Site - NE Corner at Bulkhead																	
Field Sample ID		Q1-OA-04-031906		Q1-OA-04-073006		Q1-OA-04-032308		Q1-OA-04-032209		Q1-OA-05-031906		Q1-OA-05-073006		Q1-OA-06-031906		Q1-OA-06-073006		Q1-OA-06-032308		Q1-OA-06-032209		Q1-OA-06-032010[a]		Q1-OA-06-052210		Q1-OA-06-033111		QI-OA-06-031915	
Sample Date		3/19/2006		7/30/2006		3/23/2008		3/22/2009		3/19/2006		7/30/2006		3/19/2006		7/30/2006		3/23/2008		3/22/2009		3/20/2010[a]		5/22/2010		3/31/2011		3/19/2015	
Units		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3	
Cas #	**Parameter Name**																														
71-43-2	Benzene	0.55		0.64		0.50		0.87		0.55		0.57		0.53		0.62		0.50		0.85		2.4		1.0		0.50		0.75	
100-41-4	Ethylbenzene	0.16		0.41		0.72	U	0.24	J	0.16		0.37		0.15		0.54		0.68	U	0.42	J	0.65		0.65	J	0.68	U	0.33			
91-20-3	Naphthalene	0.15	U	0.30		0.14	U	0.28	U	0.0092	U	0.39		0.23		7.3		0.14	U	0.21	U	2.0		1.1		0.48		0.14			
95-63-6	1,2,4-Trimethylbenzene	0.14	J	0.42		0.72	U	0.20	J	0.15		0.42		0.16		0.67		0.68	U	0.29	J	1.0		0.70	J	0.68	U	0.81			
108-67-8	1,3,5-Trimethylbenzene	0.039	J	0.12	J	0.72	U	0.072	J	0.045	J	0.13	J	0.057	J	0.25		0.68	U	0.15	J	0.69		0.30	U	0.68	U	0.21			
108-38-3	o-Xylene	0.19		0.46		0.72	U	0.26	J	0.19		0.42		0.17		0.52		0.68	U	0.26	J	0.74		0.76		0.68	U	0.52			
NA	m&p-Xylene	0.53		1.3		0.34	J	0.69	J	0.53		1.1		0.49		1.4		0.36	J	1.3		2.5		1.9		0.35	J	1.2			
1330-20-7	Xylenes (total) - sum of isomers	0.72		1.8		0.34	J	0.95	J	0.72		1.5		0.66		1.9		0.36	J	1.6	J	3.2		2.7		0.35	J	1.7			

Notes:
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
[a] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

115 River Road Indoor Air Data
Outdoor Air Analytical Data Quanta Site and Other Off
115 River Road Building
Edgewater, New Jersey

Location		Q1-OA-07												Q1-OA-08			
Location Description		Ambulance Bldg - 915 River Road												Fire Department - 916 River Road			
Field Sample ID		Q1-OA-07-031906		Q1-OA-07-073006		Q1-OA-07-032308		Q1-OA-07-032209		Q1-OA-07-052210		Q1-OA-07-033111		Q1-OA-08-031906		Q1-OA-08-073006	
Sample Date		3/19/2006		7/30/2006		3/23/2008		3/22/2009		5/22/2010		3/31/2011		3/19/2006		7/30/2006	
Units		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3	
Cas #	Parameter Name																
71-43-2	Benzene	0.56		0.74		0.56		1.0		0.77		0.95		0.68		0.87	
100-41-4	Ethylbenzene	0.15		0.38		0.82	U	0.34	J	0.54	J	0.70	U	0.23		0.62	
91-20-3	Naphthalene	0.13	U	0.44		0.16	U	0.24	U	0.18		0.098		0.13	U	0.53	
95-63-6	1,2,4-Trimethylbenzene	0.15		0.49		0.82	U	0.30	J	0.59	J	0.70	U	0.29		0.87	
108-67-8	1,3,5-Trimethylbenzene	0.053	J	0.15	J	0.82	U	0.10	J	0.33	U	0.70	U	0.089	J	0.26	
108-38-3	o-Xylene	0.2		0.45		0.17	J	0.36	J	0.60	J	0.70	U	0.31		0.8	
NA	m&p-Xylene	0.52		1.2		0.45	J	1.0		1.6		0.40	J	0.85		2.2	
1330-20-7	Xylenes (total) - sum of isomers	0.72		1.7		0.62	J	1.4	J	2.2		0.40	J	1.16		3.0	

Notes:
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
[a] = The indoor, crawl space, and outdoor air analytical data from March 2010 were concluded to be biased high based on the re-sampling in May 2010 (CH2M HILL, 2011a). This is likely because a different analytical laboratory (Accutest Laboratories instead of Columbia Analytical Services) was used in March 2010. The March 2010 data are not usable for evaluating historical trends in indoor and outdoor air concentrations due to the high bias.

TABLE 1
Indoor Air Analytical Data - March 2008, March 2009, May 2010, March 2011, April 2012, March 2013, December 2013, and March 2015
163 Old River Road Building
Edgewater, New Jersey

Location						**Q2-IA-01**																															
Location Description						**1st floor kitchen**																															
Field Sample ID						**Q2-IA-01-032508**		**Q2-DUP1-032508**		**Q2-IA-01-031709**		**Q2-DUP1-031709**		**Q2-IA-01-052510**		**Q2-DUP1-052510**		**Q2-IA-01-030811**		**Q2-DUP1-030811**		**Q2-IA-01-040312**		**Q2-IA-01-031913**		**Q2-IA-01-121713**		**Q2-IA-01-031015**							
Sample Date						**3/25/2008**				**3/17/2009**				**5/25/2010**				**3/8/2011**				**4/3/2012**		**3/19/2013**		**12/17/2013**		**3/10/2015**							
Units						**µg/m³**				**µg/m³**				**µg/m³**				**µg/m³**				**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**							
Cas #	**Parameter Name**	**EPA Industrial IASLs**			**NJDEP Nonresidential IASL (µg/m³)**																																
		10^{-6} Target Risk (µg/m³)	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**																																	
71-43-2	Benzene	1.6	160	130	2	1.0		0.85		1.0		1.2		1.3		1.3		0.58		0.59		0.47		0.57		0.94		**1.6**							
100-41-4	Ethylbenzene	4.9	490	4,400	5	0.65	J	0.57	J	0.40	J	0.42	J	1.1		1.0		0.22	J	0.23	J	0.25	J	0.78	U	0.31	J	0.92							
91-20-3	Naphthalene	0.36	36	13	3	0.62		0.38		0.40		0.43		1.2		1.6		0.36		0.43		0.20		0.10		0.16	L	0.33							
79-01-6	Trichloroethene	3.0	300	8.8	3	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		0.76	U	0.065							
95-63-6	1,2,4-Trimethylbenzene[1]	NA	NA	31	Not Available	1.0		0.91	J	0.52	J	0.58	J	1.4		1.4		0.60	J	0.62	J	0.28	J	0.25	J	0.46	J	1.3							
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.38	J	0.30	J	0.19	J	0.22	J	0.59	J	0.55	J	0.25	J	0.28	J	0.78	U	0.78	U	0.76	U	0.40							
108-38-3	o-Xylene[2]	NA	NA	440	Not Available	0.97		0.86	J	0.49	J	0.50	J	0.98		1.0		0.27	J	0.28	J	0.35	J	0.78	U	0.38	J	1.3							
NA	m&p-Xylene[2]	Not Available			Not Available	2.5		2.3		1.2		1.3		3.4		3.2		0.80		0.85		0.89		0.51	J	0.95		3.2							
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	3.5		3.2		1.7		1.8		4.4		4.2		1.1	J	1.1	J	1.2	J	0.5	J	1.33	J	4.5							

Notes:
Shaded indicates the value is greater than or equal to one or more of the IASLs.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
NA = Not analyzed
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

TABLE 1
Indoor Air Analytical Data - March 2008, March 2009, May 2010, March 2011, April 2012, March 2013, December 2013, and March 2015
163 Old River Road Building
Edgewater, New Jersey

Location						**Q2-IA-02**																				**Q2-IA-03**			
Location Description						**1st floor dining Room**																				**2nd floor dining room**			
Field Sample ID						**Q2-IA-02-032508**		**Q2-IA-02-031709**		**Q2-IA-02-052510**		**Q2-IA-02-030811**		**Q2-IA-02-041012**		**Q2-IA-02-031913**		**Q2-IA-02-121713**		**Q2-IA-02-031015**		**Q2-IA-03-032508**		**Q2-IA-03-031709**		**Q2-IA-03-052510**			
Sample Date						**3/25/2008**		**3/17/2009**		**5/25/2010**		**3/8/2011**		**4/10/2012**		**3/19/2013**		**12/17/2013**		**3/10/2015**		**3/25/2008**		**3/17/2009**		**5/25/2010**			
Units						**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**		**µg/m³**			
		EPA Industrial IASLs			**NJDEP**																								
Cas #	**Parameter Name**	**10^{-6} Target Risk (µg/m³)**	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**	**Nonresidential IASL (µg/m³)**																								
71-43-2	Benzene	1.6	160	130	2	0.76		1.1		1.2		0.54		0.45		0.55		0.87		1.5		0.81		1.2		1.2			
100-41-4	Ethylbenzene	4.9	490	4,400	5	0.35	J	0.41	J	0.86		0.16	J	0.73	U	0.80	U	0.26	J	0.66		0.43	J	0.42	J	1.1			
91-20-3	Naphthalene	0.36	36	13	3	0.32		0.22	J	0.34		0.12		0.094		0.069		0.13	L	0.14		0.42		0.75		1.5			
79-01-6	Trichloroethene	3.0	300	8.8	3	NA		NA		NA		NA		NA		NA		0.72	U	0.053		NA		NA		NA			
95-63-6	1,2,4-Trimethylbenzene[1]	NA	NA	31	Not Available	0.41	J	0.44	J	0.82		0.28	J	0.73	U	0.80	U	0.29	J	0.82		1.10		0.80		2.4			
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.95	U	0.16	J	0.30	J	0.60	U	0.73	U	0.80	U	0.72	U	0.24		0.38	J	0.29	J	1.0			
108-38-3	o-Xylene[2]	NA	NA	440	Not Available	0.45	J	0.43	J	0.75	J	0.18	J	0.73	U	0.68	J	0.29	J	0.87		0.61	J	0.51	J	1.1			
NA	m&p-Xylene[2]	Not Available			Not Available	1.3	J	1.3		2.4		0.51	J	0.50	J	0.95		0.76		2.3		1.6		1.3		3.3			
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	1.8		1.7		3.2		0.69	J	0.50	J	1.60	J	1.1	J	3.2		2.2		1.8		4.4			

Notes:
Shaded indicates the value is greater than or equal to one or more of the IASLs.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
NA = Not analyzed
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

TABLE 1
Indoor Air Analytical Data - March 2008, March 2009, May 2010, March 2011, April 2012, March 2013, December 2013, and March 2015
163 Old River Road Building
Edgewater, New Jersey

Location						**Q2-IA-03**																	
Location Description						**2nd floor dining room**																	
Field Sample ID						**Q2-IA-03-030811**		**Q2-IA-03-040312**		**Q2-DUP1-040312**		**Q2-IA-03-031913**		**Q2-DUP1-031913**		**Q2-IA-03-121713**		**Q2-DUP1-121713**		**Q2-IA-03-031015**		**Q2-DUP1-031015**	
Sample Date						**3/8/2011**		**4/3/2012**				**3/19/2013**				**12/17/2013**				**3/10/2015**			
Units						**µg/m³**		**µg/m³**				**µg/m³**				**µg/m³**				**µg/m³**			
		EPA Industrial IASLs																					
Cas #	**Parameter Name**	**10^{-6} Target Risk (µg/m³)**	**10^{-4} Target Risk (µg/m³)**	**HQ=1 Target Risk (µg/m³)**	**NJDEP Nonresidential IASL (µg/m³)**																		
71-43-2	Benzene	1.6	160	130	2	0.59		0.47		0.47		0.60		0.54		0.89		0.88		1.5		1.5	
100-41-4	Ethylbenzene	4.9	490	4,400	5	0.74	U	0.20	J	0.20	J	0.26	J	0.71	U	0.36	J	0.45	J	0.79	J	1.3	J
91-20-3	Naphthalene	0.36	36	13	3	0.56		0.12		0.13		0.35	J	0.040	J	0.13	L	0.16	L	0.24	J	0.11	J
79-01-6	Trichloroethene	3.0	300	8.8	3	NA		NA		NA		NA		NA		0.69	U	0.80	U	0.053		0.056	
95-63-6	1,2,4-Trimethylbenzene[1]	NA	NA	31	Not Available	1.6		0.38	J	0.38	J	0.29	J	0.71	U	0.38	J	0.60	J	1.1	J	2.7	J
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	31	Not Available	0.81		0.80	U	0.72	U	0.81	U	0.71	U	0.69	U	0.80	U	0.36	J	0.98	J
108-38-3	o-Xylene[2]	NA	NA	440	Not Available	0.28	J	0.23	J	0.24	J	0.30	J	0.71	U	0.40	J	0.54	J	1.1	J	2.7	J
NA	m&p-Xylene[2]	Not Available			Not Available	0.57	J	0.64	J	0.67	J	0.88		0.72		1.2		1.6		2.7	J	5.5	J
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	440	440	0.85	J	0.87	J	0.91	J	1.2	J	0.72		1.6	J	2.1	J	3.8		8.2	

Notes:
Shaded indicates the value is greater than or equal to one or more of the IASLs.
U = Below the laboratory method detection limits
J = Data below calibration curve for that constituent, quantity estimated.
L = Laboratory control sample recovery outside the client specified limits; results may be biased low.
NA = Not analyzed
[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.
[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

TABLE 2

Subslab Soil Gas Analytical Data - March 2008, March 2009, May 2010, March 2011, April 2012, March 2013, December 2013, and March 2015

163 Old River Road Building

Edgewater, New Jersey

						Location	Q2-VI-01																													
						Location Description	Storage Room																															
						Field Sample ID	Q2-VI-01-032408		Q2-VI-02-031709[4]		Q2-VI-01-052510		Q2-VI-01-040312		Q2-VI-01-031913		Q2-VI-01-121713		Q2-VI-01-031015		Q2-VI-02-032508		Q2-VI-01-031709[3]		Q2-VI-02-052510		Q2-VI-02-030811		Q2-VI-02-040312		Q2-VI-02-031913		Q2-VI-02-121713		Q2-VI-02-031015	
						Sample Date	3/24/2008		3/17/2009		5/25/2010		4/3/2012		3/19/2013		12/17/2013		3/10/2015		3/25/2008		3/17/2009		5/25/2010		3/8/2011		4/3/2012		3/19/2013		12/17/2013		3/10/2015	
						Units	µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³		µg/m³	
Cas #	Parameter Name	EPA Industrial SGSLs 10^{-6} Target Risk (µg/m³)	EPA Industrial SGSLs 10^{-4} Target Risk (µg/m³)	EPA Industrial SGSLs HQ=1 Target Risk (µg/m³)	NJDEP Nonresidential SGSL (µg/m³)																															
71-43-2	Benzene	16	1,600	1,300	79	1.9	U	1.7		0.67	U	31	U	0.17		0.47		0.45		5.9	U	3.4		0.69	J	2.0	U	31	U	1.5	U	1.9		0.96	J
100-41-4	Ethylbenzene	49	4,900	44,000	250	50		5.8		1.3	J	16	J	0.70	J	22		0.73		1,500		180		150		450		280		210		47		29	
91-20-3	Naphthalene	3.6	360	130	26	0.46	J	330		1.7	J	31	U	0.81	U	0.40	J	0.63		3.2	J	690		5.9		9.8	U	31	U	3.2	J	1.3		0.67	
79-01-6	Trichloroethene	30	3,000	88	150	NA		NA		NA		NA		NA		0.24	J	0.044		NA		NA		NA		NA		NA		NA		0.21	J	0.35	U
95-63-6	1,2,4-Trimethylbenzene[1]	NA	NA	310	Not Available	25		49		3.5		31	U	1.7		18		1.2		2,100		690		590		1,800		1,800		1,500		260	D	13	
108-67-8	1,3,5-Trimethylbenzene[1]	NA	NA	310	Not Available	9.0		12		2.4		31	U	1.4		7.9		0.39		690		210		240		520		530		330		59		4.2	
108-38-3	o-Xylene[2]	NA	NA	4,400	Not Available	66		13		1.7	J	26	J	0.63	J	43		1.3		3,500		500		320		1,200		830		640		120		82	
NA	m&p-Xylene[2]	Not Available			Not Available	190		20		2.7	J	41	J	2.2		79		2.6		8,100		910		710		2,000		1,300		870		180		84	
1330-20-7	Xylenes (total) - sum of isomers	NA	NA	4,400	22,000	256		33		4.4	J	67	J	2.8	J	122		3.9		11,600		1,410		1,030		3,200		2,130		1,500		300		170	

Notes:

Shaded indicates the value is greater than or equal to one or more of the SGSLs.

U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

D = The reported result is from a dilution.

NA = Not analyzed

[1] = NJDEP does not provide vapor intrusion screening levels for 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene.

[2] = o-Xylene and m&p-xylene were added together and compared to the screening level for total xylenes.

[3] = The sample IDs were most likely switched in 2009.

TABLE 3

Outdoor Air Analytical Data - March 2008, March 2009, May 2010, March 2011, April 2012, March 2013, December 2013, and March 2015

163 Old River Road Building

Edgewater, New Jersey

Location		Q2-OA-01																									
Location Description		South Side of Building - Chained to Fence																									
Field Sample ID		Q2-OA-01-032508		Q2-OA-01-031709		Q2-OA-01-052510		Q2-OA-01-030811		Q2-OA-01-040312		Q2-OA-01-031913		Q2-OA-01-121713		Q2-OA-01-031015		Q2-OA-02-030811		Q2-OA-02-040312		Q2-OA-01-031913		Q2-OA-02-121713		Q2-OA-02-031015	
Sample Date		3/25/2008		3/17/2009		5/25/2010		3/8/2011		4/3/2012		3/19/2013		12/17/2013		3/10/2015		3/8/2011		4/3/2012		3/19/2013		12/17/2013		3/10/2015	
Units		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3		µg/m^3	
Cas #	Parameter Name																										
71-43-2	Benzene	0.81		1.1		1.3		0.58		0.47		0.48		0.89		1.5		0.58		0.49		0.52		0.87		1.6	
100-41-4	Ethylbenzene	0.36	J	0.41	J	1.0		0.66	U	0.77	U	0.64	U	0.29	J	0.67		0.19	J	0.23	J	0.66	U	0.30	J	0.77	
91-20-3	Naphthalene	0.14		0.14	J	0.37		0.10	J	0.41		0.069		0.059	L	0.10		0.058	J	0.057		0.072		0.047	L	0.093	
79-01-6	Trichloroethene	NA		NA		NA		NA		NA		NA		0.69	U	0.10		NA		NA		NA		0.67	U	0.061	
95-63-6	1,2,4-Trimethylbenzene	0.37	J	0.43	J	0.97		0.66	U	0.77	U	0.34	J	0.32	J	0.96		0.17	J	0.72	U	0.22	J	0.56	J	1.2	
108-67-8	1,3,5-Trimethylbenzene	0.61	U	0.20	J	0.34	J	0.66	U	0.77	U	0.64	U	0.69	U	0.29		0.63	U	0.72	U	0.66	U	0.21	J	0.39	
108-38-3	o-Xylene	1.2		0.45	J	0.86		0.66	U	0.21	J	0.64	U	0.33	J	0.90		0.21	J	0.23	J	0.66	U	0.35	J	1.1	
NA	m&p-Xylene	0.41	J	1.3		2.9		0.48	J	0.58	J	0.39	J	0.87		2.2		0.63		0.71	J	0.66	U	0.92		2.8	
1330-20-7	Xylenes (total) - sum of isomers	1.6		1.8		3.8		0.48	J	0.79	J	0.39	J	1.2	J	3.1		0.84	J	0.94	J	0.66	U	1.3	J	3.9	

Notes:

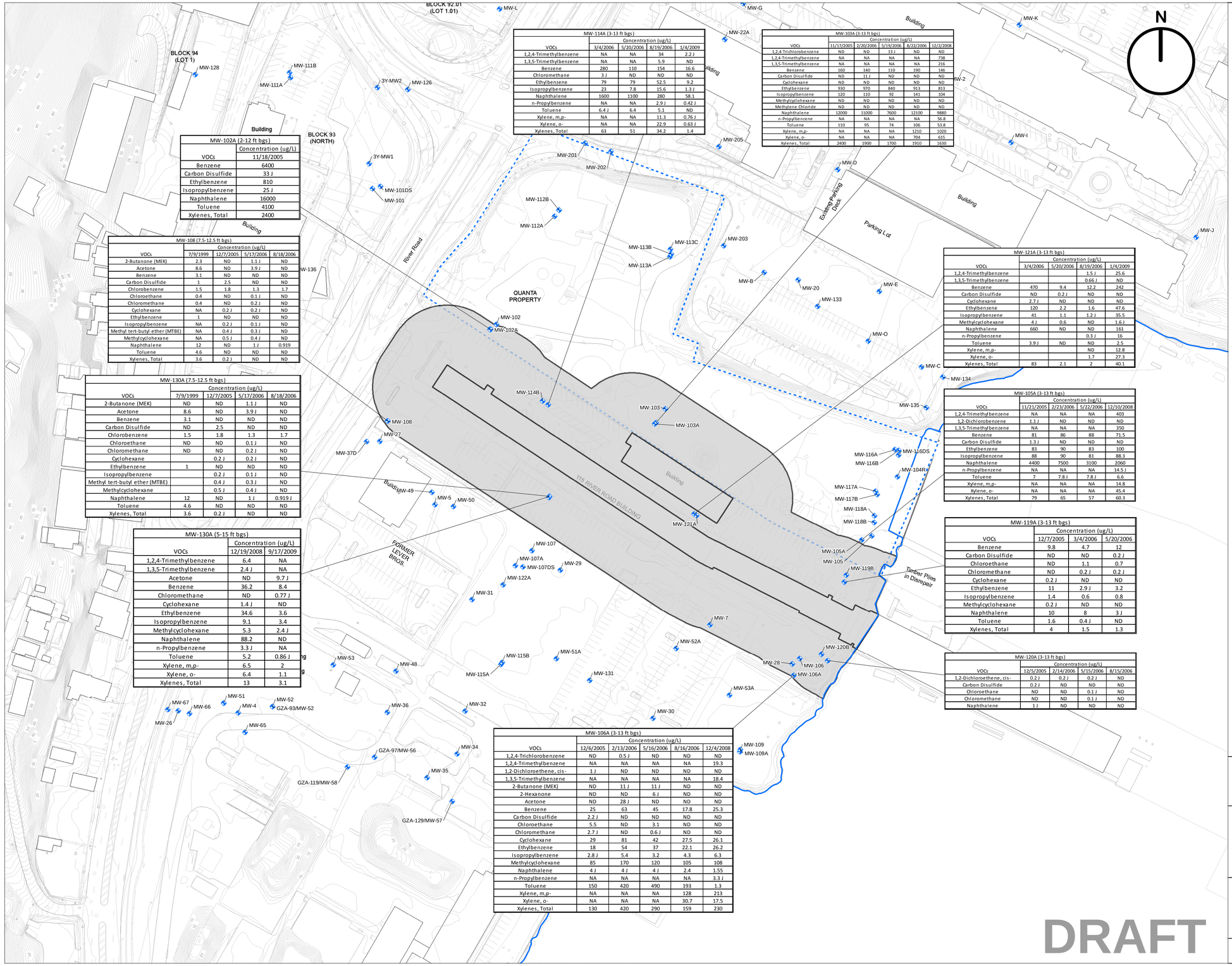
U = Below the laboratory method detection limits

J = Data below calibration curve for that constituent, quantity estimated.

L = Laboratory control sample recovery outside the client specified limits; results may be biased low.

NA = Not analyzed

Attachment H
Groundwater Concentration Figures



MW-102A (2-12 ft bgs)

VOCs	Concentration (ug/L) 11/18/2005
Benzene	6400
Carbon Disulfide	33 J
Ethylbenzene	810
Isopropylbenzene	25 J
Naphthalene	16000
Toluene	4100
Xylenes, Total	2400

MW-108 (7.5-12.5 ft bgs)

VOCs	Concentration (ug/L) 7/9/1999	12/7/2005	5/17/2006	8/18/2006
2-Butanone (MEK)	2.3	ND	1.1 J	ND
Acetone	8.6	ND	3.9 J	ND
Benzene	3.1	ND	ND	ND
Carbon Disulfide	1	2.5	ND	ND
Chlorobenzene	1.5	1.8	1.3	1.7
Chloroethane	0.4	ND	0.1 J	ND
Chloromethane	0.4	ND	0.2 J	ND
Cyclohexane	NA	0.2 J	0.2 J	ND
Ethylbenzene	1	ND	ND	ND
Isopropylbenzene	NA	0.2 J	0.1 J	ND
Methyl tert-butyl ether (MTBE)	NA	0.4 J	0.3 J	ND
Methylcyclohexane	NA	0.5 J	0.4 J	ND
Naphthalene	12	ND	1 J	0.919
Toluene	4.6	ND	ND	ND
Xylenes, Total	3.6	0.2 J	ND	ND

MW-130A (7.5-12.5 ft bgs)

VOCs	Concentration (ug/L) 7/9/1999	12/7/2005	5/17/2006	8/18/2006
2-Butanone (MEK)	ND	ND	1.1 J	ND
Acetone	8.6	ND	3.9 J	ND
Benzene	3.1	ND	ND	ND
Carbon Disulfide	ND	2.5	ND	ND
Chlorobenzene	1.5	1.8	1.3	1.7
Chloroethane	ND	ND	0.1 J	ND
Chloromethane	ND	ND	0.2 J	ND
Cyclohexane		0.2 J	0.2 J	ND
Ethylbenzene	1	ND	ND	ND
Isopropylbenzene		0.2 J	0.1 J	ND
Methyl tert-butyl ether (MTBE)		0.4 J	0.3 J	ND
Methylcyclohexane		0.5 J	0.4 J	ND
Naphthalene	12	ND	1 J	0.919 J
Toluene	4.6	ND	ND	ND
Xylenes, Total	3.6	0.2 J	ND	ND

MW-130A (5-15 ft bgs)

VOCs	Concentration (ug/L) 12/19/2008	9/17/2009
1,2,4-Trimethylbenzene	6.4	NA
1,3,5-Trimethylbenzene	2.4 J	NA
Acetone	ND	9.7 J
Benzene	36.2	8.4
Chloromethane	ND	0.77 J
Cyclohexane	1.4 J	ND
Ethylbenzene	34.6	3.6
Isopropylbenzene	9.1	3.4
Methylcyclohexane	5.3	2.4 J
Naphthalene	88.2	ND
n-Propylbenzene	3.3 J	NA
Toluene	5.2	0.86 J
Xylene, m,p-	6.5	2
Xylene, o-	6.4	1.1
Xylenes, Total	13	3.1

MW-114A (3-13 ft bgs)

VOCs	Concentration (ug/L) 3/4/2006	5/20/2006	8/19/2006	1/4/2009
1,2,4-Trimethylbenzene	NA	NA	34	2.2 J
1,3,5-Trimethylbenzene	NA	NA	5.9	ND
Benzene	280	110	154	16.6
Chloromethane	3 J	ND	ND	ND
Ethylbenzene	79	79	52.5	9.2
Isopropylbenzene	23	7.8	15.6	1.3 J
Naphthalene	1600	1100	280	58.1
n-Propylbenzene	NA	NA	2.9 J	0.42 J
Toluene	6.4 J	6.4	5.1	ND
Xylene, m,p-	NA	NA	11.3	0.76 J
Xylene, o-	NA	NA	22.9	0.63 J
Xylenes, Total	63	51	34.2	1.4

MW-103A (3-13 ft bgs)

VOCs	Concentration (ug/L) 11/17/2005	2/20/2006	5/19/2006	8/22/2006	12/2/2008
1,2,4-Trichlorobenzene	ND	ND	13 J	ND	ND
1,2,4-Trimethylbenzene	NA	NA	NA	NA	738
1,3,5-Trimethylbenzene	NA	NA	NA	NA	216
Benzene	160	140	110	190	146
Carbon Disulfide	ND	11 J	ND	ND	ND
Cyclohexane	ND	ND	ND	ND	ND
Ethylbenzene	930	970	840	913	813
Isopropylbenzene	120	110	92	141	104
Methylcyclohexane	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND
Naphthalene	12000	11000	7600	12100	9880
n-Propylbenzene	NA	NA	NA	NA	56.8
Toluene	110	95	74	106	53.8
Xylene, m,p-	NA	NA	NA	1210	1020
Xylene, o-	NA	NA	NA	704	615
Xylenes, Total	2400	1900	1700	1910	1630

MW-121A (3-13 ft bgs)

VOCs	Concentration (ug/L) 3/4/2006	5/20/2006	8/19/2006	1/4/2009
1,2,4-Trimethylbenzene			1.5 J	25.6
1,3,5-Trimethylbenzene			0.66 J	ND
Benzene	470	9.4	12.2	242
Carbon Disulfide	ND	0.2 J	ND	ND
Cyclohexane	2.7 J	ND	ND	ND
Ethylbenzene	120	2.2	1.6	47.6
Isopropylbenzene	41	1.1	1.2 J	35.5
Methylcyclohexane	4 J	0.6	ND	1.6 J
Naphthalene	660	ND	ND	161
n-Propylbenzene			0.3 J	16
Toluene	3.9 J	ND	ND	2.5
Xylene, m,p-			ND	12.8
Xylene, o-			1.7	27.3
Xylenes, Total	83	2.1	2	40.1

MW-105A (3-13 ft bgs)

VOCs	Concentration (ug/L) 11/21/2005	2/23/2006	5/22/2006	12/10/2008
1,2,4-Trimethylbenzene	NA	NA	NA	403
1,2-Dichlorobenzene	1.1 J	ND	ND	ND
1,3,5-Trimethylbenzene	NA	NA	NA	350
Benzene	81	86	88	71.5
Carbon Disulfide	1.3 J	ND	ND	ND
Ethylbenzene	83	90	83	100
Isopropylbenzene	88	90	81	88.3
Naphthalene	4400	7500	3100	2060
n-Propylbenzene	NA	NA	NA	14.5 J
Toluene	7	7.8 J	7.8 J	6.6
Xylene, m,p-	NA	NA	NA	14.8
Xylene, o-	NA	NA	NA	45.4
Xylenes, Total	79	65	57	60.3

MW-119A (3-13 ft bgs)

VOCs	Concentration (ug/L) 12/7/2005	3/4/2006	5/20/2006
Benzene	9.8	4.7	12
Carbon Disulfide	ND	ND	0.2 J
Chloroethane	ND	1.1	0.7
Chloromethane	ND	0.2 J	0.2 J
Cyclohexane	0.2 J	ND	ND
Ethylbenzene	11	2.9 J	3.2
Isopropylbenzene	1.4	0.6	0.8
Methylcyclohexane	0.2 J	ND	ND
Naphthalene	10	8	3 J
Toluene	1.6	0.4 J	ND
Xylenes, Total	4	1.5	1.3

MW-120A (3-13 ft bgs)

VOCs	Concentration (ug/L) 12/5/2005	2/14/2006	5/15/2006	8/15/2006
1,2-Dichloroethene, cis-	0.2 J	0.2 J	0.2 J	ND
Carbon Disulfide	0.2 J	ND	ND	ND
Chloroethane	ND	ND	0.1 J	ND
Chloromethane	ND	ND	0.1 J	ND
Naphthalene	1 J	ND	ND	ND

MW-106A (3-13 ft bgs)

VOCs	Concentration (ug/L) 12/6/2005	2/13/2006	5/16/2006	8/16/2006	12/4/2008
1,2,4-Trichlorobenzene	ND	0.5 J	ND	ND	ND
1,2,4-Trimethylbenzene	NA	NA	NA	NA	19.3
1,2-Dichloroethene, cis-	1 J	ND	ND	ND	ND
1,3,5-Trimethylbenzene	NA	NA	NA	NA	18.4
2-Butanone (MEK)	ND	11 J	11 J	ND	ND
2-Hexanone	ND	ND	6 J	ND	ND
Acetone	ND	28 J	ND	ND	ND
Benzene	25	63	45	17.8	25.3
Carbon Disulfide	2.2 J	ND	ND	ND	ND
Chloroethane	5.5	ND	3.1	ND	ND
Chloromethane	2.7 J	ND	0.6 J	ND	ND
Cyclohexane	29	81	42	27.5	26.1
Ethylbenzene	18	54	37	22.1	26.2
Isopropylbenzene	2.8 J	5.4	3.2	4.3	6.3
Methylcyclohexane	85	170	120	105	108
Naphthalene	4 J	4 J	4 J	2.4	1.55
n-Propylbenzene	NA	NA	NA	NA	3.3 J
Toluene	150	420	490	193	1.3
Xylene, m,p-	NA	NA	NA	128	213
Xylene, o-	NA	NA	NA	30.7	17.5
Xylenes, Total	130	420	290	159	230

LEGEND

- Monitoring Well
- Shoreline
- 100 ft. Buffer
- Quanta Property Boundary

Notes:
ND = Not Detected
NA = Not Analyzed

0 40 80 ft.

CH2MHILL

VOCS DETECTED IN SHALLOW GROUNDWATER WITHIN 100 FT OF THE 115 RIVER ROAD BUILDING

Honeywell International
Quanta Resources
Superfund Site
Edgewater, New Jersey

April 25, 2013

FIGURE 1

DRAFT

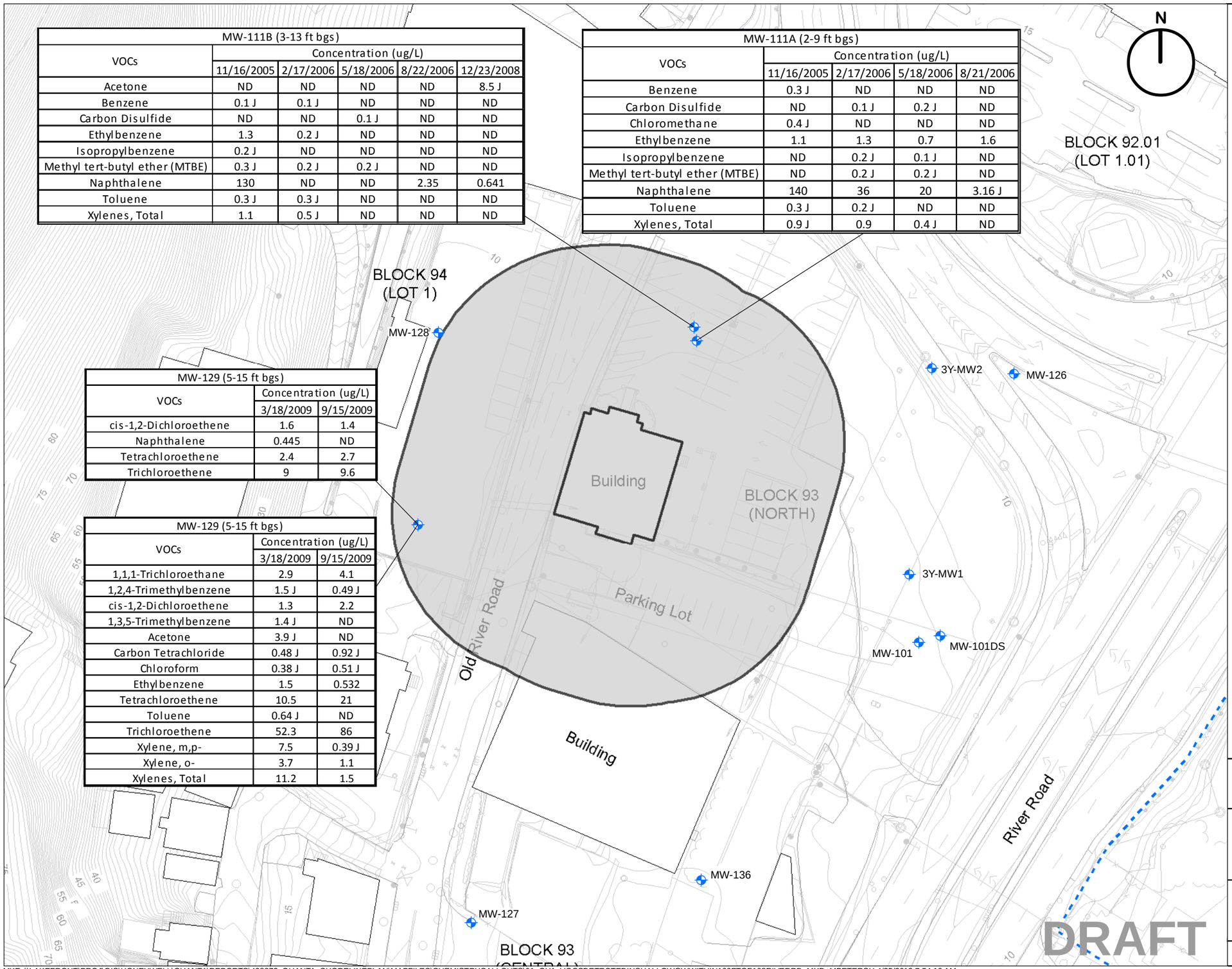
MKE \\LAKEFRONT\PROJGIS\HONEYWELL\QUANTAIREPORTS\428872_QUANTA_SHORELINEPLAN\MAPFILES\CHEMISTRYCALLOUTS\01_OU1_VOCSDETECTEDINSHALLOWGWWITHIN100FTOF103RIVERRD..MXD MPETERSH 4/25/2013 11:32:09 AM

MW-111B (3-13 ft bgs)					
VOCs	Concentration (ug/L)				
	11/16/2005	2/17/2006	5/18/2006	8/22/2006	12/23/2008
Acetone	ND	ND	ND	ND	8.5 J
Benzene	0.1 J	0.1 J	ND	ND	ND
Carbon Disulfide	ND	ND	0.1 J	ND	ND
Ethylbenzene	1.3	0.2 J	ND	ND	ND
Isopropylbenzene	0.2 J	ND	ND	ND	ND
Methyl tert-butyl ether (MTBE)	0.3 J	0.2 J	0.2 J	ND	ND
Naphthalene	130	ND	ND	2.35	0.641
Toluene	0.3 J	0.3 J	ND	ND	ND
Xylenes, Total	1.1	0.5 J	ND	ND	ND

MW-111A (2-9 ft bgs)				
VOCs	Concentration (ug/L)			
	11/16/2005	2/17/2006	5/18/2006	8/21/2006
Benzene	0.3 J	ND	ND	ND
Carbon Disulfide	ND	0.1 J	0.2 J	ND
Chloromethane	0.4 J	ND	ND	ND
Ethylbenzene	1.1	1.3	0.7	1.6
Isopropylbenzene	ND	0.2 J	0.1 J	ND
Methyl tert-butyl ether (MTBE)	ND	0.2 J	0.2 J	ND
Naphthalene	140	36	20	3.16 J
Toluene	0.3 J	0.2 J	ND	ND
Xylenes, Total	0.9 J	0.9	0.4 J	ND

MW-129 (5-15 ft bgs)		
VOCs	Concentration (ug/L)	
	3/18/2009	9/15/2009
cis-1,2-Dichloroethene	1.6	1.4
Naphthalene	0.445	ND
Tetrachloroethene	2.4	2.7
Trichloroethene	9	9.6

MW-129 (5-15 ft bgs)		
VOCs	Concentration (ug/L)	
	3/18/2009	9/15/2009
1,1,1-Trichloroethane	2.9	4.1
1,2,4-Trimethylbenzene	1.5 J	0.49 J
cis-1,2-Dichloroethene	1.3	2.2
1,3,5-Trimethylbenzene	1.4 J	ND
Acetone	3.9 J	ND
Carbon Tetrachloride	0.48 J	0.92 J
Chloroform	0.38 J	0.51 J
Ethylbenzene	1.5	0.532
Tetrachloroethene	10.5	21
Toluene	0.64 J	ND
Trichloroethene	52.3	86
Xylene, m,p-	7.5	0.39 J
Xylene, o-	3.7	1.1
Xylenes, Total	11.2	1.5



LEGEND

- Monitoring Well
- 100 ft. Buffer
- Quanta Property Boundary

Notes:
ND = Not Detected
NA = Not Analyzed

0 30 60 ft.

CH2MHILL

OLD VOCS DETECTED IN SHALLOW GROUNDWATER WITHIN 100 FT OF THE 163 RIVER ROAD BUILDING

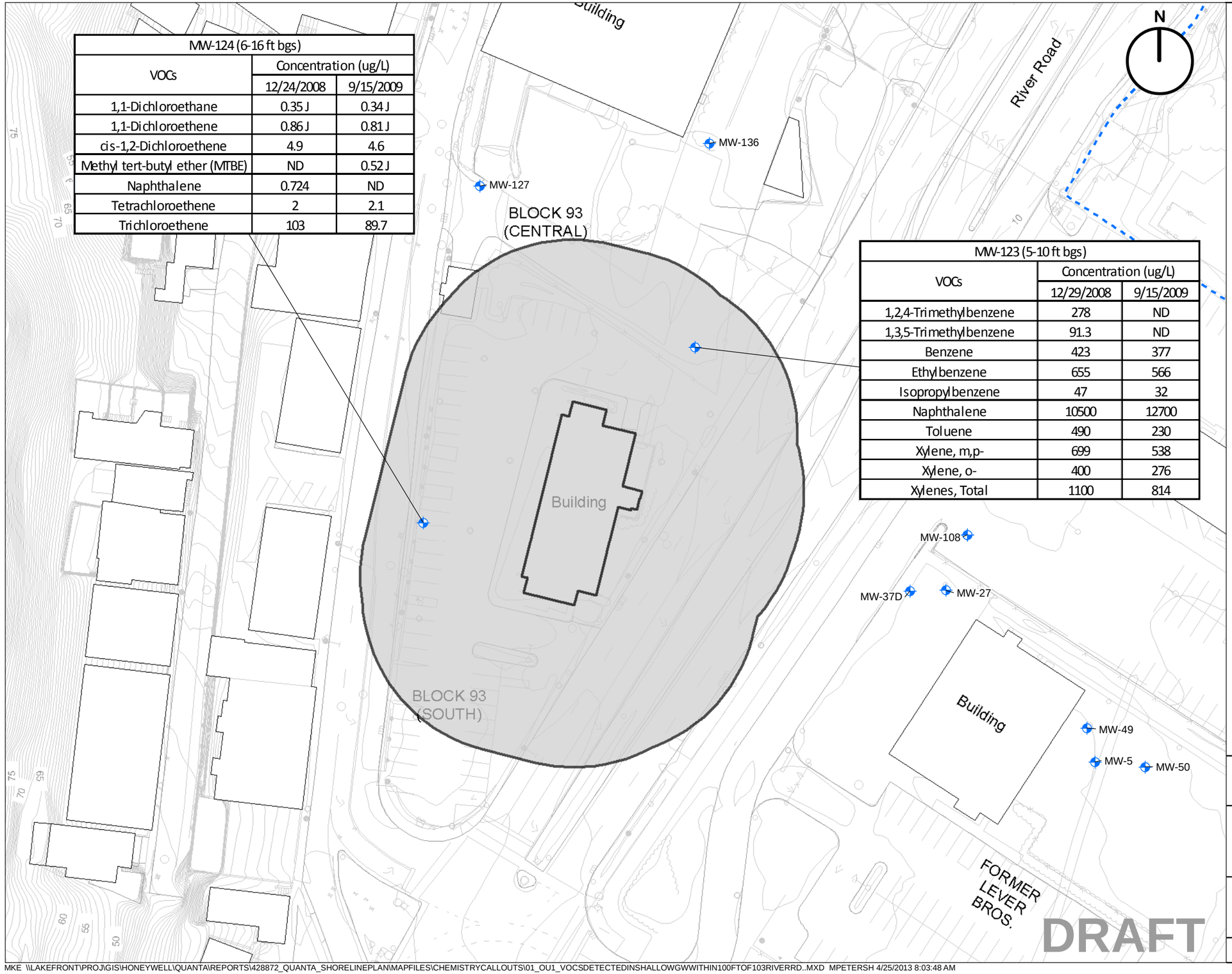
Honeywell International
Quanta Resources
Superfund Site
Edgewater, New Jersey

April 25, 2013 | **FIGURE 1**

MKE \\LAKEFRONT\PROJ\GIS\HONEYWELL\QUANTA\REPORTS\428872_QUANTA_SHORELINEPLAN\MAPFILES\CHEMISTRYCALLOUTS\01_OU1_VOCSDETECTEDINSHALLOWGWWITHIN100FTOF103RIVERRD..MXD MPETERSH 4/25/2013 7:54:10 AM

MW-124 (6-16 ft bgs)		
VOCs	Concentration (ug/L)	
	12/24/2008	9/15/2009
1,1-Dichloroethane	0.35 J	0.34 J
1,1-Dichloroethene	0.86 J	0.81 J
cis-1,2-Dichloroethene	4.9	4.6
Methyl tert-butyl ether (MTBE)	ND	0.52 J
Naphthalene	0.724	ND
Tetrachloroethene	2	2.1
Trichloroethene	103	89.7

MW-123 (5-10 ft bgs)		
VOCs	Concentration (ug/L)	
	12/29/2008	9/15/2009
1,2,4-Trimethylbenzene	278	ND
1,3,5-Trimethylbenzene	91.3	ND
Benzene	423	377
Ethylbenzene	655	566
Isopropylbenzene	47	32
Naphthalene	10500	12700
Toluene	490	230
Xylene, m,p-	699	538
Xylene, o-	400	276
Xylenes, Total	1100	814



LEGEND

- Monitoring Well
- 100 ft. Buffer
- Quanta Property Boundary

Notes:
ND = Not Detected
NA = Not Analyzed

0 30 60 ft.

CH2MHILL

VOCS DETECTED IN SHALLOW GROUNDWATER WITHIN 100 FT OF THE 103 RIVER ROAD BUILDING

Honeywell International
Quanta Resources
Superfund Site
Edgewater, New Jersey

April 24, 2013 | **FIGURE 1**

MKE \\LAKEFRONT\PROJ\GIS\HONEYWELL\QUANTA\REPORTS\428872_QUANTA_SHORELINEPLAN\MAPFILES\CHEMISTRYCALLOUTS\01_OU1_VOCSDETECTEDINSHALLOWGWWITHIN100FTOF103RIVERRD..MXD MPETERSH 4/25/2013 8:03:48 AM